Losses.—The number of naval medical officers killed during the year is 14, as follows:

Fleet Surgeon G. Taylor, and Surgeons W. M. S. Miller and S. Hibbert, lost in H.M.S. *Formidable*, in the Channel, on January 1st.

Surgeon V. L. Matthews, lost in H.M.S. *Viktor* off the North of Ireland, about January 20th.

Staff Surgeon W. G. Moore-Anderson and Surgeon-Probationer R. O'C. Redmond, lost in H.M.S. *Clan Macnaghten*, in the North Sea, in February.

Surgeon F. W. Quirke, lost in H.M.S. *Princess Irene*, blown up at Shoerness, on May 27th.

Fleet Surgeon G. A. Forrester, killed on H.M.S. *Implacable*, April 25th, and Fleet Surgeon G. A. Waters, lost in H.M.S. *Goliath* on May 12th, both in the Dardanelles.

Surgeon T. L. G. Stewart (June 14th), Surgeon F. H. Rees (June 21st), and Surgeon F. J. Humphreys (September 5th), killed in the Dardanelles.

Staff Surgeon A. O. Hooper and Surgeon D. W. K. Moody, killed on H.M.S. *Natal*, blown up on December 30th.

Temporary Surgeon D. R. B. Sivright, died at the Dardanelles.

Of these officers, Surgeon Hibbert and Surgeon-Probationer Redmond belonged to the R.N.V.R.; Surgeons Stewart, Humphreys, Moody, and Sivright were temporary Surgeons; the other ten were on the active list.

Wounded: Six naval medical officers have been wounded, all in the Dardanelles.

Honours granted have not been many; they may be seen in the table above.

THE MERCANTILE MARINE.

Three medical officers of the mercantile marine have lost their lives in ships torpedoed and sunk by the enemy, Drs. J. Macdermott and J. Garry in the *Lusitania* on May 7th and Dr. Everett in the *Persia* on December 30th. It would seem probable that other ships' surgeons must have perished in some of the numerous vessels sunk by submarines, but we have not noticed the names of any others recorded.

Miss E. S. Impey, M.B., a lady doctor going out to join the Dufferin Hospital for Women at Lahore, appears also to have been lost in the *Persia*.

MOTORS FOR MEDICAL MEN.

By H. MASSAC BUIST.

WAR EXPERIENCE AND NEW DESIGNS.

At the turn of the year it is natural to take stock of the motor situation, particularly as concerns the prospects of obtaining vehicles in the future in face of the continuance of the war. As regards the British industry, it is plain that, save for releasing a limited portion of the heavy vehicle production for supply of firms concerned in war work, and for a few examples of light cars, chiefly of the assembled variety, all the resources of the factories will continue indefinitely to be fully employed on Government work.

Incidentally, the medical man will doubtless be aware that during the five months that have elapsed since last this topic was touched on in these pages a large amount of experience has been gained at the front with British-made light cars of the comparatively few well-established makes, including, notably, the Singer machines. The French also now make extensive use of light cars in the war area, running them almost invariably with open exhausts.

None of these machines is spared in the least degree, and the test is a hard one, not only of engine revolutions and reliability in the ordinary sense, but also of every part of the chassis. Much coble or *pavé* has to be traversed in the vicinity of the towns, while in the open the roads are very much broken up. It is impossible for large numbers of vehicles to be submitted to these conditions of use for month after month without the manufacturers of them learning lessons which will ensure their being able to make light cars after the war which shall be as absolutely dependable for the medical man's daily and nightly service all the year round as middle-size cars, such as Rovers, De Dions, Swifts, and the like, have been for years.

LIGHT CAR TENDENCIES.

Turning to light-car progress in quite another direction, namely, across the Atlantic, we note in such comparatively new propositions as the Saxon machine that in the New World they are using wider axles for light cars than is the current practice in Europe, and this without

appreciably increasing the weight factor. This development is likely to be followed in some degree in this country in that these wider axles are a natural corollary of the tendency that has been manifest here to lengthen light-car wheelbases. It is not only that better riding is obtained; with the wider axle there is besides the gain of enhanced lateral stability. This is of especial importance in the light car. Taken with the fact, proved by war service rendered by the British-built Singer light car, that the change-speed gear mechanism can be satisfactorily incorporated in the back axle details, even as for years past has been done in some of the middle-size and large cars, such as the Overland, it will be realized that the problem of making a highly efficient and speedy light car to hold the road is one already far on the way towards solution.

In the meantime the medical man would be wise to bear in mind that, while many varieties of light cars, assembled and otherwise, are available to him to-day, nevertheless the pick of the output is being taken, as it ought to be taken, by the Government for war service. For the rest, production is restricted by the necessity for the shops turning out other war requisites besides light cars.

As far as we can see into 1916, the only light cars likely to be available in large numbers are of the imported or of the assembled varieties; though by careful investigation here and there it will be possible to secure on occasion examples of what one might call the more classic makes that have been tried in war service and not found wanting.

A CAR TO BE LUBRICATED ONCE IN SIX MONTHS.

Turning next to middle-size cars which, from the inception of the motor movement to date, have rendered the medical profession the greatest amount and variety of service, we find that no such thing as a 1916 model has yet been announced by the British manufacturers. A few 1915 examples can be unearthed out of stock, and, of course, to the number of used cars that are being offered for sale as the strain of the war becomes more and more apparent on folks' finances, there would appear to be no end.

But there has lately been brought forward by the firm of J. B. Ferguson, of Belfast, a design for a middle-size motor-car which, as a design, is of considerable interest to the medical profession. It represents the conception of a machine of refinement of working which shall need the minimum of attention and which will nevertheless be so adequately oiled and lubricated throughout that there will be the minimum of wear on the parts, therefore the maximum of use will be obtainable. This will be called the 14-20 horse-power Fergus car. The first example has been on the road some time. I understand that in face of the impossibility of getting the type made in any numbers here the notion is to get most of the parts manufactured in America, each by a specialist.

The scheme embraces a four-cylinder 14-20 h.p. monobloc engine, in combination with a worm-driven back axle and cantilever springs. All the springs are leather bound, to ensure their retention of the lubrication, the feed of which is automatic, and to protect the leaves from damp. The side members of the frame are quite original, being of girder formation, combining great rigidity with lightness.

There are here no inaccessible parts for the owner to lubricate; consequently, no vital parts can be neglected in this connexion. In the average car of to-day there are anything up to eighty parts to attend to in the way of lubrication, many of them daily, whereas in the Fergus car there are only eleven parts to which lubrication has to be supplied, and each of these needs attention once in every six months only.

This is really studying the man who wants to look after his own car. Apart from trouble saving, automatic lubrication is preferable on the grounds of effectiveness. In turn this represents economy of wear and adjustments, and consequent reduction of repair bills to the minimum, it being assumed, of course, that each part is correctly designed for the work it is called on to do.

The frames, which are to be made at Messrs. Ferguson's own works by special presses, reveal that the designing talent employed is sound. Though of extremely light appearance, the combination of steel girder and lattice work design ingeniously provides strength precisely where

it is needed, the shape being determined by the conditions arising from the tension stresses at this point and the compression ones at that.

A NEW YEAR AMERICAN NOVELTY.

As far as concerns vehicles not used wholly for business purposes, Mr. McKenna's autumn budget largely altered the prices of American cars in this country, though, so far, those who import these vehicles in parts, and assemble them here at little cost, successfully escape all but a fraction of the duty.

As from January 9th, 1916, one of the best-known and largest American motor firms—Willys-Overland—which has already established a reputation here, is putting on the market in this country a new model car, which, though imported completely assembled, will cost only £225 for the five-seater and £220 for the two-seater, both prices being inclusive of the full duty of 33½ per cent., which represents a contribution to the Exchequer of over £40 per vehicle.

Thus the price, including duty, is brought within the range of a very large public, while no less important is the fact that the whole plan of it is essentially European and not nominally so. The four-cylinder engine comes under the 4 guinea tax, being a fraction under 80 mm. in the bore with a stroke measurement of 127 mm. The cylinders are cast in a block, the valves being all on one side.

The engine might have been designed in Coventry. It is nominally of 12 h.p. and actually capable of developing over 20 h.p., so that here we have an American car rated according to European practice, as distinct from the American fashion of rating the motor at the very utmost power it is capable of developing for a brief spell.

The chassis is of European pattern, also in having cantilever rear springs, while the three-speed gear box is combined with the back axle on a system widely tested and found successful for many years. When the lower indirect speeds are in service, this scheme represents a reduction of engine torque to a quarter the amount experienced when the gear box is at the forward end of the propeller shaft. The weight of the complete vehicle comes within the ton limit, and the tyres are proportionately large. The equipment is complete, from electrical engine-starter and lighting system, embracing dashboard inspection lamp, down to detachable rims, including a spare hood cover, gauges, pockets, foot-rests, and so on. Of course, the gear-control and hand-brake levers are worked by the left hand, because they are centrally situated to the saving of weight and attaining a better leverage. I have seen the car, which will be widely announced in the general press from now onwards.

At the moment this is about all there is in the motoring situation calculated to be of interest to the medical man.

TENURE OF MEDICAL OFFICERS OF HEALTH.

SIR PHILIP MAGNUS, M.P. for the University of London, has maintained his interest in the subject of obtaining security of tenure for medical officers of health, which he took up at the request of the British Medical Association. Last February, in consequence of his representations, the then president of the Local Government Board, Mr. Herbert Samuel,¹ stated that he was prepared to issue an order providing that in the case of future appointments of whole-time officers (medical officers of health, and sanitary inspectors), whose appointments are subject to regulations made by the Local Government Board, the officer shall continue to hold office until he is removed by the local authority with the Board's consent, or is removed by the Board. He also undertook to suggest to local authorities that all officers holding temporary whole-time appointments should be reappointed under the new terms. Sir Philip Magnus has recently approached Mr. Samuel's successor, and the following correspondence has passed:

Local Government Board, Whitehall, S.W.,
December 30th, 1915.

My dear Magnus,

In accordance with the decision of my predecessor, which was contained in his letter to you of February last, my Department have prepared an Order giving security of tenure to whole-time medical officers of health and inspectors of nuisances appointed in the future.

¹ BRITISH MEDICAL JOURNAL, March 6th, 1915, p. 429.

I entirely agree with the decision at which Mr. Samuel arrived, and am strongly in favour of security of tenure for these officers, but I must confess that my own feeling is that the present is hardly the most appropriate time for the issue of such an Order, in view of the fact that so many of our best men have given up local work for service with the army or navy, and that the conditions are now quite abnormal.

Perhaps you would kindly let me know what your views are, and whether in the circumstances you would see any objection to the issue of the Order being further postponed.

Yours sincerely,
(Signed) WALTER H. LONG.

Sir Philip Magnus, M.P.

16, Gloucester Terrace, Hyde Park,
January 4th, 1916.

Dear Mr. Long,

I have carefully considered your letter of December 30th last, for which I am much obliged.

I agree with you that the present time may not be opportune for the issue of the proposed order of your Board giving security of tenure to whole-time medical officers of health and inspectors of nuisances appointed in the future.

I understand that your reasons for postponing the order are: First, because many of the best men who previously held these posts are now serving in the army or navy, and that it is consequently undesirable that their places should be permanently filled by other applicants in their absence.

Secondly, because even when vacancies occur through death or resignation, such vacancies cannot be so efficiently filled at a time when competition for the appointments is necessarily restricted owing to the absence of many competent men who might be applicants.

These reasons seem to me quite sound, and I may add that the complaint has already reached me that advertisements have appeared in the press for the appointment by Local Authorities of medical officers to fill posts which have been vacated by those who are now serving in the army, and it is contended that these positions should be only temporarily filled, in order to enable the absent officers to resume their former duties should they so desire when the war is over.

In these circumstances, therefore, it certainly seems to me advisable that the issue of the Board's order should be further postponed.

I am, dear Mr. Long,
Yours very faithfully,
(Signed) PHILIP MAGNUS.

The Right Hon. Walter Long, M.P.,
President of the Local Government Board.

The public health service and the medical profession generally are greatly indebted to Sir Philip Magnus for his unwearying efforts to obtain the removal of the present disabilities of medical officers of health as regards security of tenure and other matters, and will, we have no doubt, agree with the general tenour of the letter with which the correspondence has at present closed.

ROYAL MEDICAL BENEVOLENT FUND.

(Continued from page 56.)

The following is a continuation of the summary of cases relieved by the Committee at its meeting on December 14th, 1915:

Daughter, aged 49, of M.D.Lond. who practised in London and India, and died in 1873. Applicant was able to supplement an income of about £20 per annum by teaching French, but owing to ill health is unable to continue this work. Relieved twice, £10. Voted £10 in two instalments.

Widow, aged 51, of M.D.Dub. who was in the R.A.M.C., and died in 1905. Applicant lives in a flat rent free, and has a small army pension. In addition to her four daughters, ages 21 to 26, she has her mother partly dependent on her. None of the daughters are strong, nor have they been trained for work. They have recently been training for nurses. Voted £5 and referred to the Guild.

Daughter, aged 55, of L.R.C.S.Glasg. who practised at Glasgow, and died in 1883. Applicant managed to earn a living before the war by teaching music, but since October, 1914, has practically lost all her pupils. Only permanent income £4 12s. per annum, and lives in own house. Voted £12 in twelve instalments. Recommended by the Glasgow branch of the Guild.

Daughters, ages 44, 50, 55, of M.R.C.S.Eng. who practised at Bodmin and died in 1912. Until father's death they were all able to live comfortably together, as the father had a life interest in some property. Only income of the daughters £5 each per annum. Voted £18 in twelve instalments jointly, and referred to the Guild.

Widow, aged 73, of M.R.C.S.Eng. who practised at Rye and died in 1891. Applicant has cataract in both eyes and unsatisfactory health. Has two daughters, both married. Lives in own house, but has only very limited means. Voted £12 in twelve instalments.

(To be continued.)