the worst of weather, for this fuel is equal to the best pre-war motor car petrol. As soon as the engine gets going, the fuel tap can be turned on. Thus there will be a gradual mixture of this spirit with the other, and, by the time the blend is used, the engine will be sufficiently warm for the ordinary fuel to serve the purpose. When the carburetter is inaccessible, it may pay to fit a quarter-gallon supplementary tank under the bonnet and a short pipe with a two-way cock connected with the main fuel pipe, whereby, for starting, aviation spirit can be used. No car should be started on benzol in cold weather.

How to Set Out.

The radiator hood should be kept on until the engine is at its full working temperature. Sometimes this will mean a quarter of an hour's going in really cold weather. It will make for petrol economy, as well as give a much better pick up. The habit of putting the accelerator full down when the engine begins running is not to be recommended. It leads to unnecessary waste of fuel through imperfect combustion and involves the grave risk of unburnt fuel getting past the pistons into the lubrication system. A tin of aviation spirit used in the way I indicate, even if some of its contents be employed twice a day—as, for example, to start the car after it has been idle for several hours in the middle of the day—will, nevertheless, last one through the best part of a winter. Indeed, as in this way a quicker start is achieved, it is an actual net saving, because less fuel is passed wastefully through the engine system before the gas begins to fire. Therefore the method is both satisfactory and cheaper. Once a modern engine is running it is easier to warm than older types, because the carburetter intake pipe of most latter day constructions is water-jacketed, or a "hot spot" system is used, consequently as soon as the water begins to increase in temperature the vaporization of the fuel is achieved more perfectly and more readily. The degree of heat necessary for vaporization may be obtained by the use of an electrical heating element, as in the system pioneered by Cadillac, or by burning a small amount of fuel. Primers using fuel which is easily vaporized even at quite low temperatures have also been employed with satisfaction in some instances, but are scarcely general on the home market. Moreover, one scarcely advises the introduction of apparatus of this sort by individuals. Rather should such developments be looked for in the direction of devices standardized by manufacturers on cars as a result of their own necessarily extensive and prolonged experiments. Probably all devices, or systems, used to aid in starting an engine have certain drawbacks as well as points of advantage. The need for a simple, dependable, and inexpensive device for this purpose, such as can be standardized by all makers, is becoming increasingly evident, particularly as fuel is made less and less volatile. Meantime, most car users will find they can get on well enough by the use of one or other of the foregoing hints.

THE SCHOOL MEDICAL SERVICE.

ADDRESS BY SIR GEORGE NEWMAN.

THE special course of instruction for the school medical service which has been arranged at the London Hospital¹ was opened on February 1st with an introductory address by Sir GEORGE NEWMAN, Chief Medical Officer to the Ministry of Health and the Board of Education. The chair was taken by Lord DAWSON, who explained that the course was not only for school medical officers but for those who intended to combine general practice with work at the school clinics on a part-time basis.

Sir GEORGE NEWMAN said that the course was an experiment. Its first purpose was to draw the attention of school medical officers and assistant officers to the clinical aspects of their work. There were now 300 whole-time school medical officers and 500 whole-time assistant officers, and the difficulty always in such administrative posts was to retain the clinical spirit. The second purpose of the course was to help general practitioners to understand a little more fully what the school medical service was and involved. When school medical inspection started many general practitioners misunderstood the situation. Some thought that child patients were being taken from them, which was not the case; others

that they themselves ought to do the inspection, and they were invited to do it but found it impracticable. Under this service over two million children were medically inspected annually in the 22,000 public elementary schools, so that the entire population of school age was covered every three years. Children found to be defective were referred in the first instance to general practitioners, and tens of thousands of children were now receiving treatment from such practitioners. There were certain conditions, however, which the private practitioner did not want to treat because treatment was too tedious or for other reasons could not well be integrated into ordinary practice. These were eye cases, ear, nose and throat cases, skin complaints, minor ailments, and dental cases, which five branches of treatment had therefore been referred to hospitals and special clinics. Sir George Newman hoped that the course would be a means of drawing attention to the importance of studying disease in the child. From the medical aspect children's diseases were important because they were the beginnings of all disease; from the social aspect, because if the problem of the child's health were solved, the problem of the national health would adjust itself. The great body of infections, for instance, which began in childhood laid the basis for future constitutional weakness. Another line of study concerned those infant diseases which were carried on into school age. Of the children who came to school at 5, approximately 37 per cent. were suffering from some physical or mental defect. A task before the school medical service was so to differentiate the conditions found in children between the ages of 5 and 14 as to determine what it was below the age of 5 which prepared the child's body for subsequent disease. Then it was necessary to study the causes of infant mortality, which was the most sensitive index to the health of the community, more so than the general death rate. Finally, the school medical service, which was the logical outcome of compulsory education, must be closely co-ordinated with the public health service. It had been too long assumed that the public health service was mainly concerned with environment. The essential element in preventive medicine was the person, and it was from environment to the person that the centre of gravity in the public health service must gradually but steadily shift. The relation of morbidity returns to environment was indirect; their relation to the habits and practices of the individual was direct.

Sir George Newman went on to emphasize the fact that the school medical service was an instance of local autonomy. It was the responsibility of the 318 local education authorities, and the function of the central government was to supervise and to secure a measure of uniformity. The service started with inspection. Originally they were pressed to make the inspection of an elaborate anthropometric character, preparatory to a complete physical survey of the English people; but this was turned down because the examination of each child would have taken from thirty to sixty minutes, and might have irritated the child and have been misunderstood by the parents. The present inspection could be carried out in from four to seven minutes. The parent still had the right to refuse to have his child inspected, but the percentage of objections, never high, was now at vanishing point. Next came medical treatment, rendered necessary not only in the case of the five classes of ailments and defects just mentioned, but in the case of families who had no medical attendant to whom the children could be referred. The clinics now numbered 900.

He thought it an advantage to have whole-time officers to undertake inspection, but he was equally persuaded that for medical treatment there were great advantages in having part-time doctors who were practising clinical medicine and surgery in the district. The Government had done its best to encourage local authorities to staff their clinics on this principle; long before it became statutory for the local authority, in making provision for medical treatment, to consider how far that treatment could be provided by the private practitioners of the area before setting up any distinct machinery, that had been the policy of the Board of Education. There were at present under local authorities 730 general private practitioners at work in the school service, not to mention others in institutions. In conclusion Sir George Newman sketched briefly some of the other elements in the school service: the provision of special schools for defectives and of sanatorium schools, school meals for the ill-nourished, physical training, and the teaching of personal and school hygiene.

¹ See BRITISH MEDICAL JOURNAL, January 7th, 1922, p. 27.