MILITARY ORTHOPAEDICS.

We are glad to be able to announce that we have been given the privilege of publishing a series of articles by Lieutenant-Colonel Robert Jones, Lecturer on Orthopaedics in the University of Liverpool, whose appointment by the War Office to be Inspector of Military Orthopaedics was announced a fortnight ago. In these articles, the first of which appears to-day, he will discuss, from an experience probably unrivalled in extent and variety, the principles by which the treatment of war injuries of bones and joints and their after-consequences should be guided, and the means which—surgery—by preventive measures, by operation when necessary, and by efficient after-care—affords for completely restoring or greatly improving the locomotions of the damaged limb.

The establishment of special military orthopaedic hospitals or sections of hospitals at various centres is proof that the chiefs of the Army Medical Service appreciate the importance of the application of the principles of modern orthopaedic surgery to the cure or relief of injuries of limbs produced in the war. It is to be feared that to a great many people the mention of orthopaedics immediately suggests elaborate instruments and special boots. But this is a mistake: The instruments and boots are really confessions of failure; the true aim of orthopaedics is to correct deformities of bones and joints so that the natural action of the muscles upon them is restored. The classes of cases which come within the scope of the military orthopaedic scheme include derangements of joints, malunited and ununited fractures, injuries to ligaments, tendons, and muscles, and injuries of nerves calling for nerve suture or tendon transplantation followed by appropriate treatment for a sufficient length of time, as well as cases requiring in the last resort the fitting of mechanical appliances.

The military orthopaedic hospitals will be concerned especially with men who have received injuries of the limbs which, while they are disabling, are yet of such a nature that orthopaedic treatment—using the word in its widest sense—affords good hope that the power of earning a living may be regained in whole or in part. Such cases must be regarded from two points of view—that of the welfare and happiness of the individual and his family on the one hand, and on the other that of national economy and the maintenance of the productive power of the nation.

It may be noted in passing that, speaking quite generally, injuries of the upper limbs are, from either point of view, undoubtedly more important than wounds of the lower, since many skilled sedentary occupations are open to men who have lost a leg, or a foot, or the free use of those parts, which cannot be filled by men who have been deprived of the use of the forearm or hand.

The Financial Secretary to the War Office, in his statement in the House of Commons on March 22nd, said that in assessing permanent pensions payable to men disabled in the war it did not matter what a man earned at the moment; what was taken into account was his capacity to earn. His pension was calculated on his physical condition; it followed, therefore, that if there were nothing in a man's physical condition to prevent him from earning something, if so inclined, his pension would be reduced if he did not earn what he could. On the other hand, a man earning a very considerable rate of wages might at the same time be drawing a considerable pension. Mr. Forster did not deal specifically with cases other than the losses of amputation, but appeared to take them as exemplifying the principle by which the Commissioners of the Chelsea Hospital would be guided. When a man has lost a limb he is treated by the Chelsea Commissioners as totally incapacitated for a certain length of time, and gets the full rate of pension of 50s. a week for at least two months after he has been fitted with an artificial limb. After a certain time, say six months altogether, the case is reviewed and the man's physical condition closely examined. If the medical opinion be that his physical condition is sufficiently good to enable him to earn his living to the extent of, say, one half, his pension is reduced accordingly. The amount of the reduction, Mr. Forster said, was quite irrespective of what the man was earning at the time; if his physical condition had so much improved as to permit him to earn in the open market at least half of the full living, his pension was adjusted on that account, and not on account of the particular amount of money he might happen to be earning at the moment.

The Parliamentary Secretary to the Local Government Board, in moving, on March 23rd, the vote of £1,000,000 to the Statutory Committee constituted under the Naval and Military War Pensions Act, 1915, said that the duty of the Statutory Committee is to grant pensions to supplement those granted by the Greenwich or Chelsea Commissioners, and to make provision for the training and employment of disabled sailors or soldiers. The Committee has power to grant a supplementary pension in a case in which, after consideration of all the circumstances, it appears that the State pension, either to the individual soldier or sailor or his dependants, is insufficient; it has also to grant pensions in cases of hardship in which for one reason or another pensions have not been given to disabled soldiers and sailors. Further, it has been decided that State pensions may be granted in cases in which the disease has been aggravated by military service; that is to say, it will not be necessary for a man to prove that the disease from which he suffers is due wholly or directly to military service. Mr. Hayes Fisher stated that down to March 9th, 1916—a date anterior to that on which this concession was made—the number of disabled men discharged from the army as unfit owing to wounds and disease who had been awarded pensions and grants by the Chelsea Commissioners was 30,255; 5,470 had received final pensions, 1,335 provisional pensions, and 23,429 additional pensions, which would be reviewed later, apparently in the manner indicated by Mr. Forster on March 22nd.

We may also note here, though not directly bearing on the orthopaedic hospitals now being established, that the number of cases of amputation notified to the hospital for limbless men at Roehampton down to March 1st, 1916, was 3,128, of whom 1,825 had already been admitted to the Roehampton Hospital, and 932 had been discharged with properly fitted artificial limbs. At the date mentioned there was a waiting list of 2,027, and the cases, Mr. Hayes Fisher added, were being notified at the rate of 300 a month. In future, Seamen will, under certain conditions, be eligible to the new hospital for limbless soldiers and sailors at
Glasgow, which, like the Roehampton hospital, has been established by private benevolence, with the assistance and approval of the War Office and the Red Cross.

These statistics will help to an understanding of the magnitude of the problem with which the country is confronted, for it is certain that the number of men who suffer from injuries of bones and joints not requiring amputation must be very many times greater than the number who have to be submitted to an operation so drastic, yet, if not wisely treated, many of them may be quite as badly crippled.

FAT EMBOLISM.

FAT embolism, noted by Zemker and others in 1862, was first accurately described by von Becklinghausen in 1864. His account was founded on the case of a man who died of fat embolism of the brain a few hours after being kicked by a horse on the shin; the process was investigated by his pupil Busch, who came to the conclusion that the escape of blood into the wound of the injured bone had driven the fat into the veins.

During the last fifty years the occurrence of fat embolism has often been noted and investigated. It has been seen to follow mechanical shock or concussion without the fracture of any bone, although the traumatic or operative fracture of bones remains its commonest cause. Bürger, for example, recorded death from pulmonary fat embolism in the case of a woman who was very severely beaten with a stick on the back; the bruised and loosed subcutaneous tissues were the source of the fat in this instance. Fat embolism is said to occur frequently as a complication of osteomyelitis, and in diabetes mellitus. Its occurrence has been noted exceptionally in a number of medical conditions, such as lobar pneumonia, burns, endometritis, senile marasmus, anthrax, and poisoning by phosphorus, potassium chloride or bi- or chromate, or alcohol, in which there is no obvious cause for its appearance. It has, indeed, been found in the lungs in a high proportion of persons dying from all sorts of diseases. Scriba (1880) observed it in 24 out of 46 cases examined, counting a single fat-droplet in a pulmonary capillary as evidence of fat embolism. More recently, Nicolai found elongated droplets or "anaplas" of fat in the pulmonary vessels of 8 out of 57 cadavers; all had died of phthisis, heart disease, or renal disease, without trauma or osteomyelitis.

He notes that the occurrence of occasional droplets of fat in these vessels must be regarded as normal, quoting the experience of Cornil and Ranvier, who found similar droplets in the pulmonary vessels of 18 out of 20 normal dogs. As these authors point out, the difference between the physiological and the pathological here must be one only of degree.

It is generally stated that fat embolism may be fatal through either the lungs or the brain. Nicolai quotes a case of his own in which fat embolism of the brain was the cause of death. The patient, a man of 40, was struck on the chest and leg by a falling beam. He sustained fracture of the left tibia and multiple fractures of the ribs, but lost consciousness for only a moment. Next day his temperature, respiration-rate, and pulse-rate rose, and he became mentally dull; the day after that he died comatose, the temperature rising to 104° F., the pulse to 116, the respirations to 40.

1 A. Nicolai: Nederl. Tijdschr. voor Geneeskunde, Amsterdam, 1914, 1129.

FAT was found in the vessels of the glomeruli and the capillaries between the renal tubules; the heart also exhibited fat embolism and parenchymatous degeneration of the muscle fibres. The brain presented highly characteristic appearances. The central ova on section showed numerous small haemorrhages, which, under the microscope, displayed small vessels plugged with fat and surrounded with extravasated blood and necrotic white matter. The grey matter was free from these haemorrhagic and necrotic areas—a fact which Nicolai explains by saying that the grey matter has a better blood supply than the white. The foramen ovale of the heart was occluded, and Nicolai draws special attention to the fact that his case shows that it is possible to have fat embolism of the greater circulation without the occurrence of paradoxical embolism, or the transit of fat emboli from the right auricle to the left through a patent foramen ovale. He believes that the fat reaches the circulation directly by way of the veins, but states that Wilms (1910) and Frischke state that it may also be picked up by way of the lymphatics, and be poured into the circulation through the thoracic duct.

Wilms has even made a temporary fistula of the thoracic duct to stem the onset of symptoms of fat embolism, with success; the lymph dissected from the fistula was found to contain large drops of fat. Nicolai is of the opinion that the small and frequent pulse and the precordial pain noted in some instances of fat embolism may really be primary heart symptoms from blocking of cardiac arterioles and capillaries.

Fat embolism has been the subject of numerous experimental investigations, such substances as olive oil or melted lard having been injected into the veins of the experimental animals. Among these investigations is that published last year by Maccagno,6 who gives a rather patchy summary of the subject. It has been found that death follows if fat to the amount of about 0.2 per cent. of an animal's weight is injected into one of its veins. The fat is very slowly eliminated, partly by saponification and absorption, partly by excretion in the urine. Scriba, indeed, detected fatty droplets in the urine of 26 out of 33 patients suffering from fat embolism. Maccagno's experiments show the injection of olive and lard oil on rabbits, with the object of finding out, first, the size of the fatal dose; and, secondly, of determining the length of time required for the absorption of the emboli. He concludes that 0.1 per cent. of the animal's weight generally constitutes a fatal dose; but considerable individual variations were noted here, up to 0.2 per cent. of the body weight being tolerated in a few instances. The fat is slowly disposed of after injection. If small amounts are injected daily, death occurs when 0.1 per cent. of the body weight has been injected, but if the injections are made every four days, death is not caused until the quantity of fat injected amounts to 0.13 and 0.14 per cent. of the weight of the body. Even forty-one days after an intravenous injection fat emboli may be found in the lungs and kidneys, with more or less extensive infiltration with small round cells and fat-containing cells around the occluded vessels, and interstitial haemorrhages. Maccagno concludes that fat embolism is a cumulative process, a point that ought, perhaps, to be kept in mind in the treatment of comminuted fractures of bones and the like. The exact cause of death in his experimental animals he does not specify very clearly. Recovery after extreme dyspnoea was sometimes noted, as if gross pulmonary obstruction to the passage of blood through the lungs

was not necessarily fatal; it may be added that in the case of human beings fat embolism is said to be fatal by means of pulmonary obstruction in a little more than half the cases (Gröndahl). Almost all MacCagnio’s animals died in convulsions, and showed fat embolism of the brain and heart on section; at the same time, the right ventricle displayed considerable or extreme dilatation, and oedema of the lungs which was roughly proportional to the amount of fat injected, with areas of pulmonary infarction. He is, in fact, unable to determine to what extent fat embolism of the lungs, of the heart, and of the brain are respectively to be held responsible for death in fat embolism.

The practical conclusion he draws from his experimental work is this—that patients with fractured bones should be kept as quiet as possible for several days before any operative treatment of their fractures is undertaken, in order that the injured vessels in the bones may have time to become thrombosed; in this way the danger of further fat embolism may be minimized.

**TUBERCULOSIS SCHEMES.**

In common with many other organizations, philanthropic and otherwise, the tuberculosis campaign has of necessity become centralized in its course of activity by the necessity of a campaign against the more obvious enemy. But the work begun nearly thirty years ago and steadily pursued up to the present time has not been barren of results. Knowledge of the disease and of the means whereby its progress may be checked has been spread far and wide by various agencies throughout the kingdom, and, indeed, throughout the civilized world. Although they are all striving to the same end, these agencies have not as yet been co-ordinated, nor, except by means of scattered reports, have the experiences of each been made available for all. In order to remedy this defect and to bring all the various boards and committees into touch with one another, the National Association for the Prevention of Tuberculosis has caused a small handbook to be prepared in which are recorded the answers received to a number of questions addressed to tuberculosis authorities of every degree in Great Britain and Ireland. The main difficulty of all such authorities has been to reconcile conflicting interests. In the metropolitan area a lead has been given to lesser communities by making the county council into the central organizing authority, but the detailed work has for the most part been placed in the hands of the metropolitan boroughs, who have to share with the Local Government Board and the local Insurance Committees the duty of providing dispensary and sanatorium treatment, in association, wherever possible, with the existing general and special hospitals. It is obvious that a vast amount of work has had to be done and still remains to be completed before smooth working between so many different bodies can be attained. The publication of an index, by which the extent to which the work is being carried on can be easily and quickly ascertained, is an important step in the direction of a more definite central co-ordination of which the whole anti-tuberculosis movement stands in great need. For purposes of such reference the counties in England, Wales, Scotland, and Ireland have been separately considered, and the provisions made are set out in tabular form, a similar plan being adopted as regards the boroughs and after-care committees. The omission of these tables will show very plainly that although a great deal has been projected and approved by the authorities concerned, there still remains a very great deal to do. The effects of the war have been keenly felt in many places, not only in the shortage of well qualified tuberculosis officers, but in lack of funds, and, in some cases, lack of accommodation. The buildings hitherto used for tuberculosis cases being now required for military purposes. The work in the English boroughs would appear to have lagged somewhat behind that in the counties except in the provision of after-care committees which are doubtless easier to administer in crowded than in scattered areas. Scotland and Ireland have not been behindhand either in the provision of dispensaries or sanatoriums. In Wales, the King Edward VII Welsh National Memorial has done a great deal of valuable work, except in Pembrokeshire, where the authorities would appear to be unwilling to co-operate in a common scheme for the whole Principality. The work of co-ordination thus started under the auspices of the National Society is deserving of recognition, support, and assistance from all the tuberculosis authorities concerned, for every one of them may, directly or indirectly, profit by it as its experience increases, and the need for mutual interchange of ideas becomes more distinctly felt.

**THE CONTROL OF TYPHOID FEVER.**

A determined effort is being made in New York to reduce the prevalence of typhoid fever, and the results are already very encouraging. The number of deaths per 100,000 of the population has fallen from 14.78 in 1905-09 to 6 in 1911-14. Every case of typhoid fever is reported to the department of health is visited by an inspector, who makes careful inquiries into the history of the case and records the facts elicited on a special history card. The cards are analysed by the chief of the Division of Epidemiology, and if necessary additional investigations are undertaken to learn the source of infection and prevent its further dissemination. It is not believed that all the cases come to the knowledge of the department of health, but it is thought that three-quarters do. One result of the investigation of the whole mass of material by Dr. Charles F. Bolduan, director of the Bureau of Public Health Education, has been to show that a considerable proportion of the cases of typhoid fever occurring in New York and other cities in the United States arise in rural districts. Thus, in 1915 in New York, out of 874 cases the origin of which was definitely traced, 484 were of rural origin—that is to say, the infection contracted outside the city, and in 112 was due to milk infected at a creamery. As 2,456 cases altogether were reported those definitely attributable to extra urban infection constituted at least 20 per cent. In 1905 they were estimated to constitute 50 per cent., and this great reduction is attributed to two measures—the effective chlorination of all the water of the Croton supply, and the effective pasteurization of milk. It is also considered that the small proportion of cases due to direct exposure to another case (165), and of those due to the consumption of food contaminated by flies carrying typhoid infection (95) is very creditable to the sanitary conditions and medical supervision of the city. It is, however, added that, as typhoid immunization is now everywhere recognized as an efficient preventive, all who are called upon to treat cases of fever should insist on the use of this valuable prophylactic measure, and that the occurrence of the infection through direct exposure may be reduced to a minimum. No cases were attributed during the year to the ingestion of water or oysters, but 118 were found to be due to carriers. The rate of deaths from typhoid fever in New York is still much too high, however, compared with London, Berlin, Hamburg, or Vienna; it is possible that by the continuance of the system of inspection of every case the source of a larger proportion of those now unknown may be discovered; at any rate, what has already been accomplished will encourage the department to persevere.

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1 Handbook of Tuberculosis Schemes. National Association for the Prevention of Consumption and other Forms of Tuberculosis. London : Allardyce and Son. 1916. (Large 8vo, pp. 45. 1s.)
SHAKESPEARE’S ENGLISH IN ULSTER.

In an article entitled, “Shakespeare and the Ulster dialect,” which appeared in the Northern Whig of April 22nd, Sir John Byers has made a very appropriate and interesting contribution to the literature of the tercenary we are now celebrating. Many of the words and phrases used by Shakespeare have since been lost or are still found in the dialect of his native Warwickshire and the surrounding counties; and as it was from those districts that many of the English colonists went to Ulster at the time of the great Plantation in the reign of James I, a large number of those words and phrases are still found in the local speech of Ulster. Sir John Byers says that until the end of the eighteenth century there was a tradition in that province of Ireland that pure English was spoken at Lisburn, and so recently as in 1878 it was estimated that while a glossary of more than 2,000 words would be required to enable a modern Englishman to read Shakespeare, probably one of about a tenth of that number would be all that would be needed for the same purpose by an intelligent person who had learnt his mother tongue in the North of Ireland. “Many of the so-called ‘vulgairisms’,” says Sir John, “are found in the spoken language or dialect of the people of the North of Ireland, belong to the Augustan age of English literature, and have come down from the period of Queen Elizabeth through the English planters. These people, having once acquired the vernacular English of that wonderful time, have fortunately handed it down through their descendants as a spoken language, despite the absurd attempts of some pedants to stamp it out.” As a result this vigorous English, with its supposed “vulgairisms,” used with such effect by Sidney, Spenser, Bacon, Ben Jonson, Marlowe, and, above all, Shakespeare, “has added greatly to the recognized clearness and the subtle humour of the Ulster dialect.” A number of illustrative quotations show the zeal with which the distinguished gynaecologist of Belfast has laboured in a comparatively unexplored field of Shakespearean study. The limits of our space will allow us to give only one or two examples of more or less directly medical character. “Child” or “chile,” used in Ulster for a female infant, is found in A Winter’s Tale:

Mercy on’t: a barne; a very pretty barne! A boy or a child, I wonder?

A North of Ireland doctor often hears that a patient cannot “digest (disguist) his food,” or that he is suffering from “indigestion.” This form was common in the sixteenth and seventeenth centuries; it is found in Julius Caesar:

This rudeness is a sanois to his good wit Which gives men stomach to digest his words with better appetite.

Hamlet says: “The toe of the Pesant comes so neere the Ieedes of our courteir, hee galls his kibe.” Sir John Byers says that “kibe,” or “kibey heel,” is used in Ulster in the sense of a sore or clipped heel, often the result of chilblains. “Poke,” meaning to vomit, still survives in Ulster. Sir John Byers says that Shakespeare was the first writer to use the word; that was in 1599 or 1600, and there is no other instance of its employment by him.

THE SPIROCHAETE OF WEIL’S DISEASE.

As was noted in the British Medical Journal of April 1st, page 491, the spirochaete that causes epidemics of infectious jaundice has lately been discovered in Ulster, Inada, and the disease to which it gives rise has been identified with what is known as Weil’s disease in Europe. Drs. Ito and Matsuzaki have recently succeeded in cultivating this spirochaete, which is known as S. teterohemorrhagiae, on a variety of media besides Noguchi’s, and have published full details of the methods and results. These spirochaetes are still underdetermined, whether by longitudinal or transverse division. The organisms do not take any of the ordinary aniline dyes, but assume a pinkish or purplish colour when stained with Giemsa’s solution. The authors have cultivated three different strains of the S. teterohemorrhagiae, and find that the organism retains its pathogenicity for guinea pigs through many generations.

TROPICAL SANITATION.

In an address to the Conference of Health Officers of New York, held recently at Rochester, Surgeon-General Gorgas said that the great awakening in tropical sanitation during the last two years had its first beginning (he was speaking, no doubt, of America) in the Spanish-American war (1898-99). It had been known for four hundred years that military expeditions in which large bodies of white troops were required could not be undertaken in the tropics on account of the loss from disease. The French army in Santo Domingo in 1798, out of a total strength of 25,000, lost over 22,000 from yellow fever, and for four years the force was estimated at 20,000. Where the disease prevailed it was equally fatal to the civil populations, as was shown by the United States records and those of Spain. About the beginning of the nineteenth century there seemed to be a serious risk of yellow fever spreading over the whole world. It was evident that the epidemics which visited the United States were imported from Havana. When that city fell into the hands of the Americans in 1898 every effort was made to control the disease. In 1900 it had been made one of the cleanest cities in the world, but yellow fever was worse than it had been for years. The anti-mosquito campaign in Havana was begun in February, 1901, and the disease was eradicated in September of the same year, and had since then practically disappeared in the northern hemisphere. In 1898 Sir Ronald Ross had demonstrated that malaria was conveyed by man to man by another species of mosquito, the Anopheles, and the same conditions existed as to the transmission of malaria as with that of yellow fever. It was evident, therefore, that a very slight extension of the measures taken for the re-pression of yellow fever should be sufficient against malaria, and this had proved to be the case. A brief account of the sanitary work done during the construction of the Panama Canal was given and Gorgas showed how near it came to failure in the beginning, before the members of the Commission were won over to the views of the sanitarians. In June, 1905, he asked that Gorgas and his fellow workers should be replaced by “men more practical and sane.” Fortunately, this request was not acceded to, and the last case of yellow fever occurred in Panama in September, 1905; since then only one case had occurred in the Republic. Sanitary conditions also rapidly improved in other ways, and soon the isthmus, in respect of health, compared favourably with many parts of the United States. Gorgas attributed the extraordinary improvement in the general health conditions of Panama to the social betterment caused by the high wages paid the workers. He added that if such...
wages were paid now in New York, "all the poverty, sickness, and degradation caused at present by low wages would be rapidly ameliorated." He had laboured in a field where great results in the improvement of the public health had been achieved, but he was sure that those would be small compared with the results that would be produced by the payment of a sufficient wage to the toiler.

CONTROL OF PETROL SUPPLIES.

The President of the Board of Trade has appointed a committee "to control the supply and distribution of petrol, to consider what measures are necessary to the protection of the national interest" (1) to ensure that adequate supplies of petrol shall be available for the purposes of war and for other essential needs; (2) with the above object to regulate the use of petrol for other purposes in the United Kingdom during the period of the war; and, subject to the direction of the Board of Trade, to give executive effect to the measures decided on." The members of the committee are Mr. Oliver Bury (chairman), Mr. Albert Edward Bowen, Sir John Prescott Hewett, G.C.S.I., and Mr. Philip G. L. Webb; the secretary is Mr. H. W. Cocks, to whom communications may be addressed at 29, Colston Street, Westminster, S.W. The committee will not consider individual applications for supplies of petrol. A few weeks ago a communication was addressed to all medical practitioners asking them to answer certain questions with regard to their use of petrol-driven vehicles, and the amount of petrol consumed. We are informed that some 8,000 of 9,000 members of the profession have as yet failed to return the form of inquiry. It is important that this should be done whether or not the practitioner uses a car or motor cycle, in order that full statistics may be laid before the committee, which, as will be noted, has executive powers, and will have to estimate the amount of petrol which should be liberatd for the use of medical practitioners. Any members who may have mislaid the form can obtain another on application to the Secretary, National Health Insurance Commission, Buckingham Gate, S.W.

ARSENOLOG NPHRITIS.

Medication with arsenical drugs is in all probability more general nowadays than ever before. The most recent arsenical preparations are chemical substances that are supposed to attack the organisms of disease rather than the tissues of the patient—to be, that is to say, paratropic rather than organotrophic, in Ehrlich's nomenclature. Yet even with the use of the best types of arsenical compounds, such as salvarsan, kharisvan, neo-salvarsan, galyl, and the like, cases of poisoning occur from time to time, and acute nephritis is one of the forms in which this arsenical poisoning makes itself manifest. Drs. Pierce and Brown have recently investigated this nephritis in guinea-pigs treated with toxic but sublethal doses of various arsenical drugs. Speaking generally, they find the renal changes here to be much the same in dogs as they are in guinea-pigs; the arsenical compounds used were arsenious acid, arsenic acid, sodium cacao-dylate, salvarsan, neo-salvarsan, arsacat, arsenophenylglycine, and atoxyl, and they were administered by intraperitoneal injection. The authors find that the renal changes are of two main varieties: In one of these the kidneys are red, hyperemic, and haemorrhagic; the toxic lesion is mainly vascular. Arsenious acid, arsenic acid, sodium cacydylate, salvarsan, and neo-salvarsan all produce an acute nephritis of this type, with comparatively little necrosis of the tubal epithelium. The other variety of nephritis is that produced by arsacat, arsenophenylglycine, and atoxyl; here the main lesion is tubal necrosis and the vascular injury is subordinate. There is a more or

It has been suggested that benevolent societies be formed for the benefit of the families of officers and other ranks of the medical services auxiliary to the Regular Royal Army Medical Corps—namely, the Special Reserve, the Territorial Force, and new army. Funds would be raised by voluntary subscriptions, and it has been proposed that each branch of the service should appoint a committee of five to seven members to administer its own funds. A meeting, presided over by the Director-General, will be held in the Lecture Theatre of the Royal Army Medical College, Grosvenor Road, S.W., on Wednesday, May 10th, at 3 p.m., and it is hoped that as many officers as possible will attend. In the meantime any inquiries may be referred to Lieutenant-Colonel G. St. C. Thom, R.A.M.C., War Office, S.W.

SCHOOL CLINICS FOR LIVERPOOL.

Liverpool has been slow in making adequate arrangements for the treatment of its school children found on inspection to be suffering from medical defects. Other great cities have had organized schools of health for several years, and the advantage to the children and the work of education has been proved beyond dispute. The Liverpool venture is of no great magnitude, certainly not when the greatness of the city, the number of its school children, and the area of its poor quarters are taken into consideration. The venture to continue the establishment of a clinic for the treatment of enlarged tonsils and adenoids is proposed to provide for the necessities of 800 to 1,000 cases in each year at a cost of £995. Truly it is not a great scheme for so great a city; there is no provision for the teeth, or eyes, or the several minor ailments that ruin school attendance and reduce the Government education grant, and incidentally make school work somewhat of a purgatory to the little ones. But, may be, this is only a beginning, a foreshadowing of a more ample scheme, and as such the local profession will welcome it. The time has gone when children judged to fail of the physical standard rightly set up by the school doctors should be expected to plead for charitable medical attendance; the community, through the voice of Parliament, has clearly made it the duty of local authorities to consider and meet these necessities, and no local authority not taking this duty has found cause to do other than congratulate itself on the results.

A COMMITTEE, among the members of which are Dr. L. B. Aldrich-Blake, Dean of the London School of Medicine for Women, and Mrs. Henry Fawcett, has been formed to raise a fund for a memorial to the late Dr. Mary Murdoch of Hull, an obituary of whom was published in the BRITISH MEDICAL JOURNAL of April 1st. It is proposed that the memorial shall take the form of a bronze or bronzes in connexion with the school to be supplied for the assistance of young women in their first years of practice. Subscriptions should be sent to the honorary treasurer, the Hon. Mrs. Franklin, 50, Porchester Terrace, London, W.