

TROPICAL DISEASES IN THE BALKANIC WAR ZONE.

In his paper read before the Royal Microscopical Society on Dec. 18th, Dr. Aldo Castellani, Lieutenant-Colonel, Italian A.M.C., described the tropical diseases commonly met with in the Balkanic zone during the war. Of these, he said, the most important and the commonest was malaria, which had often taken on a malignant character and had given endless trouble by simulating many other diseases. Only a routine blood examination can exclude errors in diagnosis. Next to malaria the dysenteries, amebic and bacillary, were the commonest affections. Enteritis due to flagellates had occurred, and more rarely a form with a ciliate infection. Coccidiosis was also observed. Cholera and paracholera had been rare, although a choleraic type of bacterial dysentery had been observed, and a form of diarrhoea was seen in starving Serbian soldiers during the Albanian retreat which closely resembled the famine diarrhoea of India. Camp jaundice (*Icterus castrensis*) had been common. Dr. Castellani distinguishes two varieties: (1) a very severe type (*gravis*), hæmorrhagic, with high fever lasting 10 to 12 days, and occasionally relapsing—this is true Weil's disease, and fortunately rare; (2) the common mild type (*levis*), often afebrile, but probably in many cases spirochætic in origin, like the severe form. Fevers of the enteric group, fairly frequent in the Balkans, had not during the last year assumed epidemic type. Paratyphoid A and B were in certain districts more frequently met with than true typhoid. Fevers resembling paratyphoid but due to intermediate germs had also been noted. Colonel Castellani and G. A. Lurie found in some cases the *Bacillus colombensis* as causal agent. Not infrequently mixed infections were found in all the three possible combinations—viz., T.A., T.B., and A.B.; while two cases of triple infection, T.A.B., had been confirmed by hæmocultures. The method of combined vaccination devised by Dr. Castellani had given, he thought, good results, and the Serbian Army officially adopted a tetravaccine, T.A.B. + cholera. Malta fever, rare in Macedonia itself and the interior of the zone, was more frequently met with on the coast and in the adjacent islands. Kala-azar did not occur in Balkan adults, but many cases of the infantile type were seen in certain islands of the Adriatic and Egean seas. Relapsing fever was common, and in its treatment the best results had been obtained by the combined use of salvarsan and tartar emetic. At the moment, he said, typhus exanthematicus was very rare, in striking contrast to the terrible epidemic which raged in 1914-15. Trench fever was occasionally met with in both the types described in France. Pappataci fever was extremely common in certain parts of the Balkans, especially in the late summer and early autumn. Broncho-mycosis and broncho-spirochætosis were far from rare. Pellagra was also quite common in several districts in Macedonia. Of the tropical diseases of rarer occurrence Dr. Castellani instanced blackwater fever, filariasis, leprosy, sprue, intestinal myiasis, mycotic, spirochætic, and flagellate urethritis. Certain tropical skin diseases of frequent occurrence gave rise to much discomfort in summer, and were often wrongly diagnosed. Such were dermatitis interdigitalis epidermophytica, or "mango toe"; tinea cruris, or "dhubie itch"; prickly heat; and various types of tropical pyosis, such as Manson's and discoides. In 1915 Dr. Castellani saw among Macedonian peasants cases of *ulcus tropicum*, Oriental sore, *ulcus infantum*, blastomycosis, sporo-

trichosis, and accladiosis, and also numerous cases of trichomycosis axillaris flava, nigra, et rubra, of intertrigo saccharomycetica, and various other hyphomycetic affections. He had also reported two cases of Madura foot, two of keratoma plantare sulcatum, and one (typical) of ainhum. Dr. Castellani concluded with a strong plea for the routine microscopical examinations in all patients. The wealth of diagnostic problems among the conditions which he has described makes such a plea eminently reasonable.

AUTOTHERAPY IN INFLUENZA.

Dr. Luigi Meille draws attention in a recent issue of *Il Policlinico* (Practical Section, Nov. 3rd, 1918) to a method of introducing into the organism of a patient suffering from a severe form of influenza a non-heterogeneous serum which presumably contains the antibodies or antitoxins of the antigen or toxin which produces the disease, and which, beyond its own antitoxic properties, would also act as a producer of fresh antitoxins. The technique is extremely simple. The veins at the bend of the elbow having been made prominent by the application of an elastic ligature, the needle of a sterilised syringe of 10 c.cm. capacity with the piston down is introduced into one of them and the blood allowed to push back the piston and flow into the syringe. An amount of 20 or 30 c.cm. thus obtained by repeatedly detaching the syringe from the needle is emptied into a sterilised test-tube, which is then plugged with cotton-wool and covered with guttapercha. By keeping the test-tube in a slanting position for 12 hours the serum separates and 1 to 2 c.cm. are aspirated by a syringe and injected into the subcutaneous tissue of the patient. No local reaction follows, but after from three to four hours a slight febrile reaction may occur, which soon subsides without leaving any after-effects; serum disease is never observed. Dr. Meille states that the action of the serum is quickly shown by an improvement in the course of the disease; the pulse becomes stronger, cyanosis less marked, and delirium ceases. Autoserotherapy has no specific action upon complications, except by improving the general condition of the patient and favourably influencing the course of the disease.

BENJAMIN RUSH.

THE services of Benjamin Rush to American education have been well brought out by Dr. Harry G. Good, Ph.D., of Bluffton College, Berne, Indiana. At last justice has been done to the non-medical side of his life. Not without reason did Rush's friend, J. C. Lettsom, call him the American Sydenham; but he was more than physician—he was author, philanthropist, patriot, and statesman. And above all he was a brave, strong man. As Bancroft, the historian, says: "When an infectious pestilence raging in Philadelphia rapidly swept nearly 4000 to the grave Rush despised every consideration of personal safety, and was so true, night and day, to his patients that it was said of him in Europe: 'Not Philadelphia alone, but mankind, should raise him a statue.'" He was perhaps the greatest pupil of William Cullen, whose system he championed in opposition to that of Boerhaave. Chapter III. of Professor Good's work deals with the professional side of Rush's life. Apart from his psychological studies, his contributions to practical medicine have been excelled by many of his countrymen, but it would be hard to name any other who occupies the same distinguished position as a

far-seeing reformer in social and educational affairs. A fearless abolitionist, at a time (and place) when only a strong man could hold such opinions—a humanitarian in his life-long advocacy of penal reform—an ardent temperance advocate whose writings on the subject are still current—an enlightened student of insanity and an early supporter of the humane treatment of its victims—a friend of animals and an incessant pleader for their kindly treatment—such was Benjamin Rush. And beyond all this it is as an educational reformer, rather than as a physician or a patriot, that he is best remembered to-day. It is just here that Sir William Osler finds the special value of Professor Good's book. "It contains," he says, "a critical study of Rush's activities in the establishment of public schools, in the promotion of the higher education of women, in the necessity of national universities, and in the importance of bringing scientific knowledge into the daily life of the home, the farm, the workshop, and commerce. Professor Good constantly reminds one of Locke in his good sense about the education of children; and what a happy criticism to say that punishments meted out indiscriminately to boys for ignorance and immorality confuse their moral sense! For the first time we have here set forth clearly the lifelong work of Rush as an educational reformer, and to Dr. Good as a professor of the subject this has been a labour of love. The profession on both sides of the Atlantic is indebted to him for this interesting picture of one of the most versatile and distinguished of its members. I may add that we have as an appendix a full and accurate bibliography."

MYALGIA OR TRENCH FEVER.

MYALGIA is the name given to a painful affection, apparently involving the muscles or fasciæ. The connexion with true rheumatism is not always obvious, nor is it even certain that the muscles or fasciæ are really involved; but the disorder is often the direct result of damp or cold, or of excessive muscular exertion or strain. Possibly toxins or poisons absorbed from the alimentary canal are responsible for some muscular pains. Thus far Sir Frederick Taylor, and we need hardly look further for a demonstration of the weak nature of the evidence connecting myalgia with rheumatism. A generation ago muscular rheumatism was presumed to be associated with a gouty tendency and lithæmia. The crisp Anglo-American view we should expect to find in Osler and McCrae's System is not there; myalgia is simply ignored. Dieulafoy also has nothing to say on the matter. It remained for the trenches to throw light on this as on other common ailments; for "trench shin" and disabling muscular pains clamoured for investigation. The identification of trench shin as one type of trench fever¹ was made early and is now generally accepted. In a letter to our correspondence columns this week, commenting upon Dr. R. D. Rudolf's "Trench Fever Cachexia,"² Mr. A. Bertram Soltau, Colonel, A.M.S., gives reasons for thinking that nearly 80 per cent. of the myalgias of active service are due to the toxins of trench fever. In March last Mr. Soltau circulated a note to all Army medical officers in Flanders calling attention to the great variety of pains associated with trench fever, most of them,

however, originating in the fibrous insertion of muscles. The nocturnal exacerbation of the pain and the fact that it is generally increased by warmth negative a muscular origin and distinguish the condition from a true myalgia. Trench fever pain has therewith reached some measure of precise description. It is not unlikely that a comparative study of ordinary so-called muscular rheumatism may establish the same or a similar toxic origin.

ALCOHOL FOR INFLUENZA PATIENTS.

IN view of representations that have been made that there is in some districts a shortage of spirits required in treatment of patients suffering from influenza, arrangements are being made by the Ministry of Food that in the event of information reaching the Ministry indicating that an additional supply of spirits is necessary in any particular district for the treatment of such patients the Ministry will direct a special supply to that district. Steps are being taken by the Ministry to obtain representative medical opinion as to the reality and extent of the need in the various localities affected. All bottles of spirits supplied for this purpose will bear distinctive labels and will only be sold against a certificate from the doctor attending the patient.

THE PREVENTION OF SYPHILIS AMONG INFANTS.

THE generous gift of £10,000 by the Grocers' Company made it possible for the London Hospital to build wards for the treatment of venereal diseases. In-patient treatment is obviously of special urgency in the case of pregnant women infected with syphilis, and this section of the work is beginning to show results in the form of healthy offspring. It was a happy thought on the part of Dr. J. H. Sequeira to combine an "At home," given, on Dec. 18th, to some of the mothers and children who have benefited from treatment, with a medical gathering where the lessons already learned and their further application in the future would be discussed. Lord Knutsford drew attention to the large number of East-End women who miscarried as the result of syphilis, in whom proper treatment would have ensured the birth of children showing no traces of disease. There was need, he said, for other districts and hospitals to organise on a large scale to provide similar treatment. The venereal diseases department of the hospital was supplied with patients by its own obstetric and maternity departments, through the maternity almoners, from the City of London Lying-in Hospital, and by various maternity centres in the neighbourhood. Dr. Sequeira added that both married and unmarried women were dealt with, and since March, 1916, 52 pregnant women had been treated. After treatment in the special department these women were either admitted to the general lying-in ward or were attended by the out-patient charities under the supervision of the obstetric physician to the hospital. He added that, in his opinion, the women after treatment were not liable to infect others, either in the ward or outside, if the usual precautions were taken. In the East-End coöperation between the maternity and infant-welfare centres and the venereal clinic at the hospital was actually very good. He had found it safe in practice to give injections of salvarsan to pregnant women, and thought it essential to treat every such patient at

¹ T. Houston and J. M. McClellan, THE LANCET, 1916, II., 632; G. Chambers, THE LANCET, 1917, I., 752.

² THE LANCET, Dec. 14th.