

occasional imprisonment, almost stamped out the traffic from the London docks, and if similar action were taken by other magistrates and local authorities in ports such as Hull and Newcastle, similar good results might accrue. Apart from the cruelty of the traffic, it is open to question whether we are justified in aiding the Dutch and the Belgians to sell meat from diseased animals to their fellow countrymen. We shall watch for results of the new regulations with interest, and we earnestly hope that in any future prosecutions the magistrate will fine not only the person who may have been leading the horse, but the responsible seller thereof, and that, too, in the largest sum allowed by law, for the best way to impress the people engaged in this odious traffic is to make it plain that it is not profitable.

DEATH FROM MERCURIAL INJECTIONS.

At a meeting of the Société des Hôpitaux of Paris on June 18th Professor Gaucher again drew attention to the danger of injections of insoluble preparations of mercury in the treatment of syphilis and reported another fatal case of gangrenous stomatitis, which was due to injections of "grey oil," a preparation of metallic mercury much used in France. This is the tenth case of gangrenous stomatitis so produced which has come under his observation in the last few years. Eight of the cases were fatal, and of the surviving patients one has lost part of his maxilla and the other has not recovered at the end of a year. In addition Professor Gaucher has seen a large number of cases of severe but not gangrenous stomatitis due to the same cause, and knows of other cases which have not been published. Several other cases have been reported in the last few years by French writers and some have been noticed in THE LANCET. In the case now reported the patient was a man, aged 71 years, who was sent to hospital by his medical attendant on Sept. 7th, 1908. In 1905 he contracted a digital chancre, and a papulo-squamous eruption rapidly followed and then double iritis for which he was treated at the Hotel-Dieu. In 1906 gummata appeared on the left arm and rapidly disappeared under injections of grey oil. Encouraged by the good effects of the treatment his medical attendant continued the injections, giving a series of five every six months. During two years the only new symptom was an extensive intestinal hæmorrhage. In July, 1908, deafness and facial paralysis appeared and four more injections were given. Then the patient was confided to another practitioner who gave four injections of cacodylate of mercury. At the beginning of August stomatitis commenced. At first it was slight but the inflammation soon increased in extent and depth. On admission there were abundant salivation and horrible foetor of the breath. Deglutition was difficult and painful. The left half of the soft palate and tonsil were red and swollen, and covered with a greyish exudation. At the angle of the jaw there were adenitis and periadenitis. The urine did not contain albumin. Examination of the buttocks, even with the aid of radiography, did not reveal any nodules left by the injections. Improvement took place; the exudation disappeared and the inflammation became more circumscribed, leaving only a limited gangrenous area on the left anterior pillar of the fauces and tonsil. But the general condition remained serious, and on Oct. 17th a fulminating hæmorrhage took place from the mouth and the patient died in a few minutes. The necropsy showed that the pharynx and tongue were more involved than had been supposed during life; the epiglottis was superficially affected. The source of the hæmorrhage was an ulcerated artery in the tonsil. The kidneys were congested, their capsules were adherent, and microscopic examination showed interstitial nephritis with necrosis of tubal

epithelium. Professor Gaucher condemned the use of injections of grey oil as dangerous, and insisted that they were in no way more efficacious than the administration of mercury by the mouth, by which ordinary cases of syphilis could be perfectly treated. In this country Sir Jonathan Hutchinson has given utterance to similar teaching. He finds the use of mercury in the form of pills so convenient and efficacious that he cannot conceive circumstances which should induce practitioners to take the risks which injections involve. If salivation be caused when mercury is given by the mouth the drug can be stopped and ill consequences usually prevented. But when a supply of mercury has been injected only excision of the part can prevent its continuous absorption. In a case recorded by M. Sicard this was done. At the site of injections in the left buttock was a large swelling which radiography showed contained mercury. The swelling was excised and the patient recovered. But the cases in which this operation is possible are exceptional.

WHITE RICE AS A CAUSATIVE AGENT OF BERI-BERI.

IN THE LANCET of Feb. 13th of this year we published a very interesting preliminary communication, entitled "An Inquiry Concerning the Etiology of Beri-beri," by Dr. Henry Fraser, director of the Federated Malay States Medical Research Institute, and Dr. A. T. Stanton, the bacteriologist of that institution. In that paper an account was given of some carefully planned observations undertaken primarily to determine if, when other factors were excluded or controlled, people fed on "white" rice developed beri-beri; and if, on the other hand, among people under exactly similar conditions, except that "parboiled" rice was eaten, beri-beri did not arise. The full details of these investigations have now been published in No. 10 of the Studies from the Institute of Medical Research, Federated Malay States. From an introductory note we learn that Dr. W. I. Braddon, lately State surgeon of Negri Sembilan and a well-known authority on beri-beri, was associated with Dr. Fraser and Dr. Stanton throughout the course of their inquiry. It was, indeed, mainly to test the accuracy of Dr. Braddon's views as to rice being the causative agent of this disease that the investigations were carried out. Dr. Braddon, as perhaps our readers are aware, has for some time been drawing attention to the fact that beri-beri is extremely prevalent in the Malay States among the Chinese population who consume white or "uncured" rice as their staple article of diet; while among the Tamils, who use rice prepared by parboiling, and among the Malays living under primitive conditions, whose chief article of diet is rice prepared from "padi" newly husked, the disease is seldom seen. We do not propose to repeat here the details of the tests which Dr. Fraser and Dr. Stanton applied in the course of their inquiry. They were set out in the preliminary communication published in THE LANCET of Feb. 13th, and commented upon by us in our issues of Feb. 20th and May 8th. We wish, however, to refer briefly to some of the conclusions given in the detailed report now published. Shortly, the experiment, if such it may be termed, showed that out of a party of 220 persons in good health fed on white rice, which they preferred to any other sort, 20 cases of beri-beri developed in the period during which the observations were continued, while out of 273 other healthy persons living under identical conditions, except that they were fed on parboiled rice, no sign of the disease appeared. In addition to the 20 beri-beri cases in the first party, it has to be mentioned that there were other instances of illness also diagnosed as beri-beri but which were not included in the list as the clinical characters of the sickness were not typical. None of these atypical cases, however, occurred among the second party. It was not until

white rice had been consumed during a period of 87 days that the first symptoms of beri-beri were observed. It was definitely concluded that the malady was not communicable, and that the evidence was against the suggestion that it could possibly be a "place" disease. The substitution of parboiled rice for the white variety at once caused a cessation of fresh attacks among the party in which the disease had been appearing. It may be observed that although rice was the main article of diet, both parties in addition received daily allowances of dried salt fish, onions, potatoes, cocoanut oil, cocoanut, tea, and salt. Based on analyses, the diet issued to those consuming white rice was calculated to consist of proteids, 91.451 grammes; fats, 43.708 grammes; carbohydrates, 499.165 grammes; salts, 23.064 grammes; carbon, 303.75 grammes; and nitrogen, 14.8 grammes. The diet of those consuming parboiled rice was calculated to consist of proteids, 93.565 grammes; fats, 45.882 grammes; carbohydrates, 492.540 grammes; salts, 24.335 grammes; carbon, 302.34 grammes; and nitrogen, 15 grammes. The outbreak of beri-beri cannot therefore be attributed to deficiency in the diet issued, either in respect of proteids, fats, carbohydrates, or salts. The rices supplied were of uniformly good quality, and were obtained in quantities sufficient for one month at a time. No evidence was obtained to show that any article of food other than white rice was a possible source of a causative agent of the disease. As some persons had suggested that beri-beri was due to the effects of intestinal parasites, especially ankylostomes, examinations were made to ascertain the proportion of the coolies under observation who harboured these worms, but it was found that the percentage of persons harbouring ankylostomes among the sufferers from beri-beri was practically the same as the percentage among the whole of the persons under observation. The conclusion is therefore that ankylostomes play no part in the causation of beri-beri. Upwards of 1000 systematic examinations of blood were made to try to discover the presence of any organism likely to have a causal relationship to the disease, but without positive result. The authors, therefore, repeat their strong opinion that beri-beri as it occurs in the Malay Peninsula has its origin in white rice, or at least has an intimate relation with that article of diet. Samples of the rices employed in the inquiry were taken daily during the period of the experiment and submitted to exhaustive chemical analyses and microscopic examination. This portion of the investigation is still in progress, and we are informed that the results will be published in a subsequent number of the Studies from the Medical Research Institute, and that they will also form the basis for a further investigation which it is proposed to undertake.

THE RE-EDUCATION OF THE WILL IN THE TREATMENT OF DRUG HABITS.

IN the treatment of inebriety and similar drug habits so much attention has been given to the details of institutional care and to the contending claims of the many medicinal agents which are supposed to have remedial virtues that there has been some tendency to lose sight of the fact that the condition to be dealt with is at bottom a disorder of the will, and that it can only be really cured by restoring the patient's power of self-control. Impressed by the practical inconvenience of this neglect of the psychic element in dealing with these cases, Dr. W. Oscar Jennings, whose name is familiar to the medical world as a leading authority on the subject of morphinomania, has published an extremely interesting pamphlet on the re-education of the will in the treatment of the morphia habit. Dr. Jennings insists on the fact that psychical treatment is so essential that even the best conceived physiological remedies will fail to do all

that they should if they are not seconded by influences that act on the patient's mentality; and he attributes to this cause the want of success which has been met with in treating the morphia crave by alkalines and toni-sedative remedies. This point, which, of course, has to be considered in the treatment of practically all diseases, is naturally of the greatest importance in connexion with disorders where there is a predominant mental element. But it is not merely as affecting the action of medicines that this mental factor has to be taken into account; it has an even more potent influence on the efficacy of treatment by restraint. For, as Dr. Jennings judiciously remarks, when the weaning from any drug habit has been effected, not by re-education and restoration of the will, but by compulsion, this compulsion is very apt to excite a latent hostility which remains as a subconscious fixed idea to revive at some moment of weakness under the guise of a return of craving. This is undoubtedly the reason why restraint fails to produce a lasting cure in many cases of drug addiction, and it shows the extreme importance of accurate psychological study in dealing with patients of this sort. The method of psycho-analysis may, in fact, be as valuable in treating such drug-slaves as Freud has shown it to be in the re-education of the victims of hysteria. In a larger work, to which this pamphlet is designed as an introduction, Dr. Jennings proposes to illustrate by the exhaustive study of a number of cases the way in which this rebuilding of the will can be effected by the intelligent coöperation of the patient and the physician. Meanwhile his suggestive remarks may be a useful reminder to the advocates of compulsory restraint that very often in matters of conduct no less than in matters of thought

"He that compels against his will
Is of his own opinion still."

POISONOUS FISH IN CHINA.

IN the *Archives de Médecine Navale* for July Surgeon-Major Oudard describes a serious outbreak of "alimentary intoxication" which occurred on board the French battleship *Alger* while stationed in Chinese waters. The place where the event happened is not precisely stated, but we gather from the context that it was Shanghai. 70 men in all were almost simultaneously affected, the symptoms being nausea, vomiting, violent colic, diarrhoea, heart weakness, accentuated chilliness followed in a few hours by considerable elevation of temperature, dilatation of pupils, and partial suppression of urine. Only one death took place, the deceased being a young man who had previously suffered from a renal disorder. By a process of exclusion the cause was traced to the ingestion of a fish that was served for dinner at 6 o'clock in the afternoon. The first case came for treatment about 8 o'clock, the remainder following at brief intervals all through the night. Some cases were more severely affected than others, but all were grave, necessitating the employment of powerful remedies, including ether, caffeine, and artificial serum injections. It was the first case that subsequently proved fatal. The man had been transferred to a hospital on shore, and a post-mortem examination was made there at Surgeon-Major Oudard's request. Nothing in particular was found, only: "the ordinary lesions of an alimentary intoxication." Portions of the deceased's organs were sent to the municipal laboratory for examination, but the results were negative. The report, which was in English, stated that "no trace of arsenic was found, and careful search failed to reveal the presence of any other metallic poisons." The diagnosis Surgeon-Major Oudard states was influenced by the total absence of the symptoms which are of such frequent occurrence.

concentrated meat-juices, milk, eggs, and stimulants which were passed through a fine tube into his mouth. 30 cubic centimetres of antitoxin were injected into the skin of the abdomen on three consecutive days. The painful spasms were relieved by morphia and his constipation by aperients. Three days after the third injection of antitoxin a rash developed (antitoxin rash). On the 24th he was able to bend his left knee. On the 26th he complained of great pain in the bowels and had frequent diarrhoea which lasted two days. This was relieved by a large dose of castor oil and a few drops of laudanum. On the 29th he was less rigid and could move both legs and open his mouth a little and began to eat solid food. On the following day (the 30th) he was sick and continued vomiting for 14 hours. The vomit was at first bilious but afterwards became faecal. He was collapsed, his extremities were cold, the pulse was very rapid, and the temperature was subnormal. Nutrient enemata and stimulants were administered by the rectum. When I saw him the next morning the vomiting had ceased and I found him sleeping and lying on his side with his legs curled up. He had taken a little nourishment by the mouth. Subsequently he got better daily and left the hospital on May 14th.

The case has several points of interest: (1) The long incubation period and the very gradual onset; (2) the normal temperature throughout; (3) the successful use of antitoxin; and (4) the intestinal trouble, first frequent diarrhoea which was followed three days later by symptoms of intestinal obstruction, and which looked like bringing about a fatal issue.

Malmesbury.

Reviews and Notices of Books.

Special Hospitals: Their Origin, Development, and Relationship to Medical Education; their Economic Aspects and Relative Freedom from Abuse. By RICHARD KERSHAW. London: George Pulman and Sons, Limited. 1909. Pp. 72. Price 2s. 6d.

Mr. Kershaw, who is the secretary of the Central London Throat and Ear Hospital, is naturally a warm advocate for special hospitals, and his unassuming little monograph certainly pleads their cause with eloquence. He commences by giving some historical instances of specialism, referring, of course, to the famous passage in the second book of Herodotus about specialism in Egypt. In places Mr. Kershaw is led into looseness of expression, as, for instance, on p. 20, where he says, "In the fifteenth and sixteenth centuries, the renaissance of medical science led to the establishment of universities and to the foundation of medical corporations," as if neither of these bodies had existed previously. Now all the great European universities were founded long prior to the fifteenth century. Bologna, Paris, and Oxford were all founded in the twelfth century, as was Montpellier, which was for many years the greatest European medical school, with the possible exception of Salerno. Further on Mr. Kershaw says that during the same period so little had medicine developed that at the Universities of St. Andrews and Glasgow it was held to be a section of the faculty of theology, from which it was not separated "until at the University of Aberdeen the first professor of medicine and the only teacher of medicine then in Britain was appointed." Mr. Kershaw does not give the date of this appointment. The University of Aberdeen was founded in 1494, and if this date or one within some 15 years later is meant, Linacre was probably lecturing on medicine at Oxford. He returned to Oxford from Italy after 1491, and Wood says that he was lecturing, though he does not specify in what subject, in 1510. We think that "the only teacher of medicine in Britain" is too bold a statement. With regard to the mention of medicine as a department of the faculty of theology, this implied no disrespect. Medicine and the priesthood had been closely connected all through the middle ages for the simple reason

that a religious house was about the only place where a man had the leisure to study, and, moreover, the clerks were about the only members of the community who could read. Many eminent clerics studied medicine, such as Grossetete and Roger Bacon, and conversely many eminent medical men took orders, such as John of Gaddesden and Linacre himself.

In the second part of his book Mr. Kershaw gives a valuable chronological account of the special hospitals founded during the nineteenth century. Thus the London Fever Hospital was founded on May 1st, 1801, by some "Inhabitants of London" at a meeting in the Old Thatched House Tavern. With regard to the charge that special hospitals are proportionally more expensive than general hospitals, Mr. Kershaw, though quite alive to the fact that it is not fair to judge of the efficiency of a hospital by its economy, shows that, taking 15 general hospitals and 31 special hospitals, the cost per in-patient per week in the former is £1 17s. 4d. and £1 13s. in the latter, while an out-patient in a general hospital costs 7½d. per attendance and in a special hospital 8½d.

In his last chapter Mr. Kershaw deals with the matter of abuse of charity. In his opinion, the special hospital is free from this abuse, and he gives some figures from the records of the Central London Throat and Ear Hospital, which certainly show that the institution is valued by medical men. During the year 1908 there were 10,481 new out-patients and 706 in-patients. Of the former, 3067 and of the latter 392 were sent in by medical practitioners. The book ends with a tabulated list of special hospitals founded during the nineteenth century in the United Kingdom, with figures for 1907 showing the proportion of patients sent by medical men. These figures show that medical men send patients in large numbers to the special hospitals, in which case the institutions "may reasonably claim exemption from any charge of abuse or injustice," says Mr. Kershaw with considerable force.

In the chapter wherein the author deals with specialism and medical education, there are given figures showing how the special hospitals are sought after by medical men and post-graduate students, and the chapter ends with a quotation from Sir James Paget's speech at the International Medical Congress of 1881 wherein he argued forcibly in favour of true specialism. The increase of knowledge, he said, was greater than that of mental power, and "for complete knowledge no one can hope for success unless by limiting himself within the few divisions of the science for which by nature or by education he is best fitted." Given a good general foundation, specialism is now almost a necessity for a comprehensive knowledge of any branch of medicine, and Mr. Kershaw's book marshals the arguments for it in a quiet and dignified fashion.

The Last Days of Charles II. By RAYMOND CRAWFORD, M.A., M.D. Oxon., F.R.C.P. Lond. Oxford: At the Clarendon Press. 1909. Pp. 80. Price 5s. net.

THE study of the medical aspects of the deaths of prominent persons is one which is always of interest, especially when, as in the present case, the matter is surrounded by doubts which are by no means easy to clear up. Of old time the only historical studies of deaths that had any medical aspect about them were flavoured with the odium theologium to an extent which made them, however interesting, extremely untrustworthy, to say nothing of the remarkably vague notions of medicine which prevailed even until the eighteenth century. We need only refer to Lactantius with his "De Morte Persecutorum" and in later times to a delightful little eighteenth century work called "God's Fearful Judgements upon Tyrants and Sinners" as examples. But the book now

the civil population, many of whom scoff at the simple precaution of boiling goat's milk before consuming it. While the true Malta fever has thus been reduced, there is another, though less severe, form of illness termed the "three days' fever" which is prevalent in the island, as well as in other Mediterranean stations. To investigate this a committee of army surgeons was appointed by P.M.O. Colonel J. G. MACNEECE, R.A.M.C., with the result that the cause was found to be an infection transmitted by the bites of the midge owl (*Phlebotomus papatasi*) which constitutes a veritable pest in Malta and elsewhere during the hot season. An experiment was made on the person of Lieutenant H. G. GIBSON, R.A.M.C., who volunteered to submit to be bitten by specimens of these insects which eight days previously had fed on a patient during the first day of the disease. A week later Lieutenant GIBSON was seized with the usual symptoms of the three days' fever—vomiting, severe pains in the head, back, and limbs, with rise of temperature lasting three days. Similar experiences had already been reported by Dr. R. DOERR in Bosnia and Herzegovina. The specific organism of the disease, however, has yet to be discovered.

Epidemic Cerebro-spinal Meningitis.

Epidemics of cerebro-spinal meningitis have occurred during 1909 in various parts of America; in France, at Paris and other places in the Department of the Seine, and at Evreux and elsewhere in the Department of the Eure. Other outbreaks have been reported in Switzerland, Italy, and Austria. In Prussia up to the end of October 950 cases had been notified, with 402 deaths, a case-mortality of 42.6 per cent.; in the previous year 1226 cases and 530 deaths were reported, giving a case mortality of 43.2 per cent. It is interesting to mention that in Westphalia, and also at Leyden in the Netherlands, epidemics of what is termed "infantile paralysis" occurred during the year, but whether these outbreaks were related to epidemic cerebro-spinal meningitis it is not possible to say. Something of the same sort is said to have occurred in certain parts of the United States, including Chicago. In Cyprus a widespread prevalence of cerebro-spinal meningitis was reported by Dr. G. A. WILLIAMSON, acting chief medical officer of health. Beginning in December, 1908, and extending to the end of May, 1909, no fewer than 1153 cases and 600 deaths were certified, yielding a case mortality of 52 per cent. The disease also occurred in Constantinople and in the Arabian province of Assyr. In Japan, at Yokohama, and other places outbreaks were also reported.

There is a growing opinion that the treatment of this malady by intraspinal injections of anti-meningococcic serum offers the best chance of recovery. The serum of FLEXNER and JOBLING still enjoys a high reputation, especially in America, where it is claimed that the case mortality has been reduced from over 70 to 20 per cent. In Germany KOLLE and WASSERMANN'S serum is preferred, and in France a serum prepared at the Pasteur Institute by M. DOPTER, on a principle suggested by M. ROUX, has been recently used with good results. This serum is obtained by immunising horses by means of living cultures and not by microbial extracts. In Austria a plan for preventing danger from "carriers" of the meningococcus by spraying and washing out their nasal cavities with pyocyanase has been abandoned, as the specific microbes of the disease could be shown to persist in the nasal passages for weeks, notwithstanding the use of the remedy.

Sleeping Sickness.

The year 1909 has seen a considerable advance in our knowledge of this disease, and for information as to this we are largely indebted to the London Sleeping Sickness Bureau, which was established late in 1908. The director of the bureau, Dr. A. G. BAGSHAW, acts also as editor of the

monthly bulletins, which contain valuable summaries of the more important contributions made from time to time by investigators of trypanosomiasis at home and abroad. More especially do these bulletins make public the work done by the Commission appointed by the Royal Society and which went out to Uganda under the leadership of Colonel Sir DAVID BRUCE, F.R.S., about the end of last year. One important work which this Commission has already done has been the repeating and confirming of the experiments made by Professor F. KLEINE, which suggest that the parasite of sleeping sickness undergoes a cycle of development in the body of the *Glossina palpalis*. In the columns of THE LANCET we have frequently during the year directed the attention of our readers to the more interesting contributions summarised in these monthly bulletins. In a paper read before the Society of Tropical Medicine and Hygiene on Oct. 22nd, and published in full in THE LANCET of Oct. 23rd, Dr. BAGSHAW gave a *résumé* of the Advances of our Knowledge of Sleeping Sickness which had been made within the last 12 months, affecting specially our knowledge as to the transmission, means of diagnosis, clinical characters, treatment, and prophylaxis of the disease. During the year the report of the French Sleeping Sickness Commission by M. MARTIN, M. LEBŒUF, and M. ROUBAUD has been published, as also that of the German Commission by Professor R. KOCH, Professor M. BECK, and Professor F. KLEINE. In THE LANCET of Oct. 30th we summarised the main points of the latter report.

Dr. ALLAN KINGHORN, of the Liverpool School of Tropical Medicine, who had been investigating sleeping sickness in North-Eastern Rhodesia and Central Africa, and who published in THE LANCET of Sept. 25th a paper on the *Trypanosoma Dimorphon*, has now proceeded, at the request of the Secretary of State for the Colonies, to West Africa to investigate the disease there with a view of framing recommendations for the prevention of its spread in that region.

It is with great regret that we record the death, on March 8th, of Captain FRED HALLAM HARDY, R.A.M.C., from sleeping sickness, at Aden, whither he had gone after contracting the disease, it is said, in Nyassaland, where he had been at work under the Commission. This adds another to the many medical men who have died as martyrs to scientific research.

Beri-beri.

The subject of beri-beri has been brought prominently before the public during 1909 by questions asked in Parliament about deaths from the disease on board ship, by letters in the public press, and by discussions and papers in our scientific societies. The questions in Parliament related chiefly to occurrences of beri-beri on ships arriving in this country from foreign ports, and as to deaths of Lascars from this disease. It was suggested in the House of Commons that a commission should be appointed to investigate the causation of beri-beri, but the matter was ultimately allowed to drop. In the *Shipping Gazette* a number of articles on the disease by ships' officers and others were published, but these did not throw any fresh light upon the subject. In THE LANCET of Feb. 13th we published a preliminary report by Dr. HENRY FRASER and Dr. A. T. STANTON of the Institute for Medical Research, Kuala Lumpur, Federated Malay States, who produced evidence showing that beri-beri in the Malay Peninsula was intimately associated with the consumption of white or "uncured" rice. We commented in THE LANCET of August 7th on the detailed report of these two investigators, but we are still awaiting the final results of the further inquiries which are being made by them. The white rice theory was brought under the notice of the Society of Tropical Medicine and Hygiene by Dr. W.

LEONARD BRADDON in a communication read on April 16th and discussed at that and the subsequent meeting in May. Dr. BRADDON has for some years contended that the use of white rice was the main cause of beri-beri. The same subject was also discussed by him and others at the Medical Congress which met at Bombay early in the present year. In the *Shipping Gazette*, in one of the articles referred to above, a list of ships known to have arrived in this country with beri-beri cases on board during each of the last five years was published on Oct. 30th, and from this it appears that during the present year over 60 cases had been landed from eight ships up to October, and of these 9 or 10 had terminated fatally. The disease is known to be not infrequent on board Norwegian sailing ships on long voyages. One such ship reached Falmouth from the South Sea Islands in October with 10 sufferers on board, and some excitement was aroused in the Tyne by the arrival there of a Brazilian man-of-war with some 25 cases on board. Apart from such ship-borne instances, beri-beri is not often seen in Great Britain.

Malaria.

The subject of malaria was discussed with some earnestness, not to say acrimony, at the Medical Congress which met at Bombay early in the year, the debate ultimately bearing good fruit. For owing in part to the prominence given to the question at the Conference, the Government of India called together at Simla in October a conference of Indian experts on malaria with a view of obtaining information as to the distribution of the disease and the measures best adapted in different parts of the country to prevent its occurrence. Fuller references to both the Congress and the Conference will be found in the section dealing with the scientific work of the Naval, Military, and Indian Medical Services. Malaria, we hear quite recently, has of late shown a tendency to increase in the port of Bombay. The story of malaria in Mauritius was told in the report of Professor ROSS and Major C. E. P. FOWLER, R.A.M.C., and we discussed it in THE LANCET of March 27th. We drew attention in our columns of July 24th to a puzzling outbreak of malaria in an island of the Seychelles group, which raised the question if this disease could ever occur without the agency of anophelines. In this connexion we may mention that in the annual report for the year ended March 31st, 1909, on the Bechuanaland Protectorate, the fact is stated that malaria prevails in the almost waterless Kalahari Desert, where the few water-holes that exist are often a hundred miles or more apart, and where consequently it is scarcely possible that anophelines can be bred in any numbers. The suggestion is therefore made that in the Kalahari there is probably some other transmitter of the malaria parasite than the mosquito.

A national league against malaria has been founded in Italy under the presidency of Professor BACCELLI with Senator GOLGI as chairman of the local organising committee, which, in addition to the two names already given, comprises Professors LUSTIG, GOSSIO, GOBBI, DI MATTEI, CANALIS, Dr. PICCHI, and others. Professor BACCELLI proposes that a national, or better still an international, congress on malaria should be held in Rome in 1911.

The possibility of malaria spreading in our own country under certain conditions cannot be ignored. Captain P. S. EASTON, R.A.M.C., has recently published in the journal of his corps the case of a young soldier, born and bred in London, who had never been out of England, but who was attacked, after a few months' residence in camp at Aldershot, by illness proved by examination to be malaria, the parasites having been found in the blood. He remembered being bitten on the wrist by a "gnat" about a month before removal to hospital. Anophelines, it may be added, have already been observed at Aldershot, where also there are

living a number of men returned from foreign service who have had malaria, and whose blood therefore at times may furnish parasites to infect local mosquitoes.

Blackwater Fever.

During the year reports of two scientific investigations of blackwater fever have been made public. The first of these related to an inquiry, undertaken at the instance of the Government of India, by Captain S. R. CHRISTOPHERS, I.M.S., and Dr. C. A. BENTLEY, and which was conducted in an intensely malarious district at the foot of the Himalayas between Nepal and Assam. The report was issued as No. 35 of the Scientific Memoirs of the Medical and Sanitary Departments of the Indian Government. The second investigation, financed jointly by the Colonial Office and the Liverpool School of Tropical Medicine, was carried out in Nyassaland by Dr. J. O. W. BARRATT and Dr. WARRINGTON YORKE. The report was published in the Liverpool Annals of Tropical Medicine and Hygiene. Both reports throw considerable light on the causes which combine to bring about the condition known as blackwater fever.

African Entomological Research.

The relationship which exists, particularly in Africa, between biting insects and the spread of certain diseases in man and animals has at last been recognised by the British Government, for in August of this year the Secretary of State for the Colonies appointed a special African Entomological Research Committee which is to investigate the above relationship, as also that of biting insects to economic plants and their cultivation. The committee comprises a number of well-known entomological experts, and among the medical members we may mention the names of Sir PATRICK MANSON, F.R.S., Colonel Sir DAVID BRUCE, F.R.S., Colonel A. W. ALCOCK, F.R.S., Colonel D. PRAIN, F.R.S., Dr. ROSE BRADFORD, F.R.S., Professor G. F. NUTTALL, F.R.S., and Dr. A. G. BAGSHAW. Much good work in the way of research has already been done by the staff of the Natural History Department of the British Museum as regards mosquitoes and the tsetse flies. During 1909 Mr. E. E. AUSTIN of that staff brought out a very valuable volume on "African Blood-sucking Flies," on which we commented in an article published in THE LANCET of Sept. 18th.

Advisory Committee for Tropical Africa.

During the year the departmental committee appointed to investigate the complaints which had been made with regard to the West African Medical Staff presented their report, and this was duly considered by the Secretary of State for the Colonies, along with the recommendations which were put forward for the improvement of that service. As a result the Colonial Office have nominated an advisory committee on medical and sanitary questions connected with the British Colonies and Protectorates in tropical Africa. The committee consists of eight members, two of whom, including the chairman, represent the administrative staff of the Colonial Office, while the remaining six are medical men, viz., Sir PATRICK MANSON, K.C.M.G., F.R.S., Sir RUBERT BOYCE, F.R.S., Dr. THEODORE THOMSON, O.M.G., Dr. W. T. PROUT, C.M.G. (late P.M.O. Sierra Leone), Professor W. J. R. SIMPSON, C.M.G., and Dr. J. K. FOWLER, late Dean of the Faculty of Medicine, University of London.

FORENSIC MEDICINE.

THE DEVELOPMENT OF WORKMEN'S COMPENSATION.

This section of the Annus Medicus is largely taken up with cases arising out of "workmen's compensation." The list of cases might easily have been made longer, as all who read our columns know, but the decisions quoted are those in which the issues raised have depended most intrinsically on medical evidence, and which best illustrate the probable relevancy of medical evidence on future occasions. The