

# British Medical Journal.

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## RESEARCH IN TROPICAL MEDICINE.

In July, 1904, the then Secretary of State for the Colonies appointed an Advisory Committee for the Tropical Diseases Research Fund, to which the Imperial Government, the Government of India, and numerous Colonial Governments and the Rhodes Trustees contribute. The report of this Committee for the year 1906 has been issued this week as a parliamentary paper. The revenue of the Fund for the year 1906 was £3,000, the contributions from Colonial Governments amounting to £1,800, from the Imperial Government and from the Government of India £500 each, and from the Rhodes Trustees £200. The sum of £1,000 was granted to the London School of Tropical Medicine, and devoted to the payment of the salaries of a combined teacher and investigator of protozoology and a combined teacher and investigator of helminthology, and to the provision of suitable laboratories. A grant of £500 to the Liverpool School of Tropical Medicine was expended in paying the salaries of lecturers in economic entomology and parasitology, and in tropical medicine, both officers being required to devote their spare time to research. By means of a grant of £750 the University of London was enabled to establish a Professorship of Protozoology, the first incumbent being Mr. E. A. Minchin, formerly Jodrell Professor of Zoology at University College, and recently employed in Uganda in the investigation of sleeping sickness. The sum of £500, granted to the Royal Society, was employed in a research into sleeping sickness.

The ends which the Advisory Committee endeavoured to obtain by this allocation of the money at its disposal were on the one hand to provide instruction in regard to tropical diseases for medical officers employed in the colonies and protectorates, and on the other to further research work and investigation as to the nature and causes of such diseases. Medical officers appointed to posts in the Crown colonies or protectorates are under ordinary circumstances required to undergo a course of three months' training at one of the schools of tropical medicine, and the Committee had before it a suggestion from the Liverpool School that the period of three months is insufficient and should be extended to six months. The Committee, however, expresses the opinion that the extra cost and delay entailed by insisting upon attendance at a six months' course in the case of medical officers on first appointment would be serious, and that it would be better to arrange that those medical officers considered by the Colonial Government under which they serve to show exceptional promise should attend a more advanced course of instruction on the first occasion of their being on leave of absence in England.

With regard to research in tropical colonies and protectorates, the report states that in April last the Secretary of State for the Colonies addressed a circular letter to the Governors insisting on the necessity for scientific research by specially trained officers in tropical colonies. It was pointed out that a step in this

direction had already been taken by the establishment of a research institute at Kuala Lumpur in the Federated Malay States, and by the creation of bacteriological posts in Hong Kong, the Straits Settlements, Ceylon, Mauritius, and British Guiana. These seven or eight appointments, however, Lord Elgin stated, were insignificant in number when compared with the work to be done. As a difficulty had under present conditions been experienced in filling them, he suggested that when a colony or protectorate had any adequate medical staff and was in a position to vote funds to scientific purposes, a sum might be voted for the express purpose of detailing one or more of its medical officers to study the latest phases of modern scientific research in the best known centres, and afterwards to carry out further researches in the colonies before reverting to ordinary professional work. Lord Elgin also observed that it would be necessary to provide that the medical officer, after his special course, should not be diverted to some other colony, and that care should be taken in the selection of a medical officer for this privilege; he should be granted full pay and free passages, and it should be recognized that leave of this kind would be a great boon to the officer, not only as affording leisure for scientific research, but also as qualifying him for higher posts in the future should he take proper advantages of his opportunities.

Upon the value of two of the most important researches, carried out with the aid of the Tropical Disease Research Fund, readers of the BRITISH MEDICAL JOURNAL have excellent opportunities of forming an opinion. Dr. Leiper, who about a year ago reported in our columns the significant observation that if a cyclops containing guinea-worm larvae were placed in a 0.2 per cent. solution of hydrochloric acid it was killed, but the larvae were awakened to great activity, eventually escaped, and swam freely about, now gives us in a paper published at p. 129 a careful report on his recent investigation in West Africa. Dracontiasis is not confined to West Africa, but occurs also in other parts of that continent, and in certain districts in India, in Persia, and in Arabia; it appears, however, to be particularly troublesome in Nigeria, and has twice attacked the black troops in epidemic fashion.

The fact that the larvae of the guinea-worm (*Dracunculus medinensis*) undergo no metamorphosis in water, but soon die, has long been known, and more than thirty years ago Fedschenko showed that the embryo made its way into the body of a small crustacean of the genus cyclops it which it underwent metamorphosis, and he suggested that the larvae were taken into the alimentary canal of man while still within the host cyclops and there set free. He failed, however, to produce infection artificially by means of infected cyclops, and doubt was therefore cast upon his hypothesis. The fact that the adult guinea-worm is usually found in the legs, led to the promulgation of the theory that the embryos entered through the skin while the person was bathing or drawing water. There appears, however, to be little doubt that this theory is incorrect, the fact being the embryos are set free in the stomach of the host during digestion, the worm finding its way to the lower limbs owing to what has been called geotropism, a term which, however, does not explain very much. Dr. Leiper points out that prophylactic measures must be founded upon the recognition of the facts that the embryo cannot withstand desiccation, that cyclops is the intermediate host, and that infection of man takes place by the mouth. When once the mature guinea-worm has made an aperture through the skin the contact of water causes it to extrude its embryos, and

Dr. Leiper suggests that the prophylactic measure most immediately available would be the railing in of village ponds so that persons drawing water and possibly suffering from dracontiasis in this stage should not be able to enter the ponds. With regard to larger places it seems pretty clear that the establishment of a municipal water supply with proper safeguards would at once enormously reduce if not altogether abolish the disease.

The other research to which we refer is that with regard to the treatment of sleeping sickness, which, as is well known, is due to infection by a trypanosome, the intermediate host being a biting fly, *Glossina palpalis*. The great explorer, Livingstone, found that arsenic was of some value in the treatment of nagana, the tsetse-fly disease of horses, which is due to another trypanosome; but recent experiments have shown that though arsenic when first administered produced marked degeneration of the parasites in the blood of infected animals, this effect was only temporary, the parasites reappearing in spite of steadily increasing doses of arsenic. In so intractable a disease, however, such a clue seemed to be well worth following up, and experiments were made by the Liverpool School of Tropical Medicine with various organic compounds of arsenic, and eventually a drug called atoxyl (meta-arsenic-anilid), which contains 37.6 per cent. of arsenic, was found most nearly to fulfil the desired conditions. Large quantities of the drug have been sent out to the West Coast of Africa, but reports of the results obtained have not yet been received. Meanwhile, Drs. Breinl and Todd have contributed to the JOURNAL this week, page 132, a paper in which they review very impartially the probable merits of atoxyl and the mode in which it is best administered. They speak with much caution, inasmuch as they recognize that the immediate improvement which usually follows the administration of the drug may not be permanent. Experiments in the laboratories seem to show that while in some cases cure is effected, in others the improvement is merely transitory. A warning to this effect from Professor Ronald Ross was published in the JOURNAL on September 29th, 1906, in consequence of sanguine reports from Belgium, and in an editorial comment on the matter in the same issue the danger of forming a premature opinion as to the curative value of atoxyl was insisted on.

As many statements have lately appeared in the lay press to the effect that Professor Koch has at length "discovered" atoxyl as a cure for sleeping sickness, Professor Ross addressed a letter to the *Times*, in which he corrects this doubly misleading statement. But it ought in fairness to be pointed out that Professor Koch can hardly be held responsible for all the misleading statements which popular journalism attributes to him. In his own reports he states explicitly that he knew before the expedition started that atoxyl had been found useful for trypanosome infection; and he also makes it quite clear that, though he confidently expects great things from atoxyl, his investigations have not been continued for a long enough period to justify the statement that this drug can effect a permanent cure.

#### THE TRYPSIN TREATMENT OF CANCER.

IN this week's EPITOME a full abstract is given of Dr. William J. Morton's report of a series of experiments made to determine the value of trypsin in the treatment of cancer. We have already pointed out that the sensational statements which have appeared in certain newspapers rest on a very slender basis of

fact, but we think it right to give our readers an opportunity of estimating for themselves the value of the evidence so far available. It may not be irrelevant to mention, in the first place, that Dr. Morton is not a surgeon, but is described as "Professor of Diseases of the Mind and Nervous System, and Electro-Therapeutics" in the Post-graduate Medical School and Hospital of New York. He is, we should judge, a man of open mind, with perhaps a slight tinge of optimism in regard to the value of a new remedy. In 1902 he reported to the Harvard Medical Society of New York City<sup>1</sup> a series of cases of "malignant growths treated with the x rays," with results which seem to us as good as those now claimed for trypsin. He said then that by means of the x rays there seemed to be no doubt that epithelioma of the skin can be cured, and that broken-down carcinomata of deeper tissue, with the portions of new growth exposed because of cutaneous sloughing, could be favourably influenced by the same treatment. Three years later<sup>2</sup> he recommended "x and radium radiations" as preliminaries to surgical operation. He said that radiation treatment exerted a retarding effect on the growth of some cancers and cured some, and he predicted that preoperative radiation would increase the ratio of cures by operation. Dr. Morton states that his experiments with trypsin arose in connexion with a series of cases which he had under treatment by other measures, mainly x ray, radium, and fluorescence. Would it be rash to conjecture that some at least of the cases now reported as illustrating the therapeutic effect of trypsin are examples of the ultimate failure of methods of treatment the first effects of which had seemed to warrant hopes that were not justified by the event?

Dr. Morton says that he has tried the trypsin treatment in "about 30 cases." To speak by the card, the number is 29. Among these, however, there are 3 of sarcoma and 2 of lupus; these should be excluded from a report on the treatment of cancer. It will be noted that among the remaining cases there were 11 of epithelioma of the face, the parts affected being the nose, the cheek, the eyelid, and the inner canthus. It is not stated that in any of these cases the disease was rodent ulcer, but the sites suggest that in some of them at least it was of this relatively benign type. Except in 1 case nothing is said about microscopic examination of the growths. Without insisting on these points, however, and taking the results in the 24 cases of "cancer" as given by Dr. Morton, we find that 3 patients died; in 14 great improvement took place, in 3 little or no good effect was produced; in one case, described as "uninstructive as regards trypsin," the patient, who had become pregnant, was advised to undergo a surgical operation; 3 were "cured."

We give these results crudely without inquiring too closely as to the exact nature or degree of improvement, or speculating as to its duration. It must in fairness be borne in mind that Dr. Morton says most of the cases were hopeless and inoperable, so that any improvement must be accounted a gain. On the other hand, it must be pointed out that in some of the cases other treatment was employed in addition to the trypsin and amylopsin injections. Of the "cures" one must be set aside, for the patient, after suffering many things from trypsin, had finally to submit to the knife. Dr. Morton claims this case as a cure, because the trypsin seemed on the evidence of the microscope to have destroyed the tumour. It need scarcely be said, however, that de-

<sup>1</sup> EPITOME, April 26th, 1902.

<sup>2</sup> *Medical Record* (New York), May 25th, 1905; abstracted in EPITOME of June 17th, 1905.

struction of the tumour by no means implies cure of the disease. In this case, as in the other two which were "cured" for less than four and two months respectively, it remains to be seen whether the arrest of the cancerous process will be more lasting than that produced by other agents. None of these so far has yielded results at all comparable in point of permanency to those of the knife.

Dr. Morton himself, it will be observed, is a good deal less enthusiastic than those who have proclaimed his results as proving that the "conquest of cancer" has been achieved. He contents himself with saying that trypsin deserves a fair trial, but he will not commit himself to an opinion as to its therapeutic value until he can speak from a larger experience. We certainly think that he has made out a case for a trial on a larger scale, and such a trial we understand is now being made, or is about to be made, in some London hospitals. The results of these experiments will be awaited with interest. In the meantime, our own attitude in regard to the matter is expressed in the *Medical Record* in a leading article which appears in its issue of December 22nd, 1906. "The results of the trypsin treatment in 'this country,'" says our New York contemporary, "are 'not sufficient to carry conviction, and further trials 'may yet result in another disappointment and lead to 'the abandonment of the method, but we believe such 'trials are fully justified by the apparent success 'already obtained.'"

We cannot conclude without referring to a strange misconception which exists in the minds of those whose function is supposed to be the enlightenment of public opinion. It seems to be assumed that doctors are indifferent about the discovery of a cure for cancer, and inclined, as a matter of professional principle, to reject anything which is offered as a remedy. The newspaper in which the vision of trypsin as the sign in which cancer was to be conquered was first made manifest, has said that its object was to awaken the medical profession to a sense of its duty in regard to cancer. This may be dismissed as merely an impertinence intended to cover retreat from an untenable position. But the *Westminster Gazette* in all seriousness says it is a mystery why the proclamation from the housetops of the triumph of trypsin should prove offensive to professional ideas. The mystery is one of our contemporary's own making, and it had already supplied a solution in a previous part of the very article from which we quote where it is said that "it seems cruelty incarnate to give 'to thousands a glimpse of hope in the midst of their 'misery by the untimely announcement of a new 'cure' 'for this ghastly disease.'" This is exactly the opinion we have ventured, in less violent language, to express, and it is just for such an untimely announcement that we have felt bound to censure the trumpeters of trypsin.

The public need not have the slightest fear that the medical profession is not alive to the importance of the cancer question. Research is being organized more and more thoroughly every year, and investigators in different countries are striving with each other for the honour of a discovery that will deliver mankind from one of the worst of the many ills to which it is still a prey. It is nonsense to suggest that doctors are jealous of discoveries made by those not of their own household. By whom is Pasteur held in greater reverence than by the medical profession? What we do object to is the announcement as "discoveries" of hypotheses which are but the unsubstantial fabric of a vision, and the publication of exaggerated statements, especially those made by patients, in whom naturally the wish is father to the

thought. Premature jubilation about questionable cures is "offensive to professional ideas," for the sound reasons that it tends to discredit scientific research, and is detrimental to the public welfare.

#### THE NEW ADVISORY BOARD.

THE reconstruction of the Army Medical Advisory Board, which we announced in the *BRITISH MEDICAL JOURNAL* of December 29th, 1906, as impending, is now an accomplished fact, and the names of the new members will be found at page 155. On the whole, we think it a fairly strong Board, though it might not be difficult to suggest certain improvements. An especially satisfactory feature is the presence of Sir Frederick Treves; it is not too much to say that by his withdrawal from the Board the country would have lost one of the best guarantees of the efficiency of the medical service of the army.

On the general constitution of the Board, and the enlarged functions assigned to it, we have already expressed our opinion; the machinery is good, and it only remains to be seen whether the War Office will allow it to be used in a workmanlike manner. In other words, as it is to be "more distinctly 'advisory in its functions,'" will its advice carry greater weight with the military authorities? The range of its activity covers the whole professional life of the soldier and everything relating to the health and physical efficiency of the army. Its duties are to advise on medical and surgical questions affecting the military services on all matters of military hygiene, and on the provision of hospitals and their equipment. It will also advise as to the admission of candidates, courses of study for officers, the appointment of examiners for examinations for promotion, the appointment of professors and teachers in the Royal Army Medical College, and the government of the College.

We have received certain criticisms of the changes in the constitution of the Board to which we have given careful consideration. It is said that the meetings of the Board are not to be periodic as hitherto, the summoning of them being left to the discretion of the Director-General, and it is suggested that a reactionary Director-General might "squash out 'the civilian element entirely.'" This would seem to be an unwarranted assumption; we understand that it is intended that meetings shall be held periodically, and so far from there being any likelihood of the civilian element being "squashed," the association of the civilian members of the Board with the medical administration of the army will be closer than it has hitherto been. Again, it is alleged that the Board is only to make an annual report, and "otherwise only on questions submitted by the Director-General." As a matter of fact the new Board will report as often as may be necessary. It will take an active part in drawing up the annual report of the medical department of the army; this is a great improvement on the methods of the old Board, and will give Parliament and the country an opportunity of gauging the work done by the service. Another criticism is that selection for promotion and posts is entirely removed from the Board and placed in the hands of surgeon-generals "who are of the old stamp and will reintroduce 'militarism in excess.'" As to this it may be said, in the first place, that the old Board had nothing to do with selection for posts. As to pro-

motion and the allegation that the surgeon-generals are men of the "old stamp" the critic seems to be misinformed. If he had taken the trouble to look at the Army List he would have seen that of the ten surgeon-generals nine were selected by the old Board. This fact should be sufficient to reassure the critic, who is an admirer of that Board, as to the modernity of the present type of surgeon-general. Another criticism—that the Board will no longer inspect hospitals—we do not understand; this will be, in fact, one of its most important duties. We are equally unable to follow the objection that "this (the non-inspection of hospitals) will be a death blow to the promised efficiency of military hospitals and to the 'centralization' scheme, which was well on the road to being fulfilled." What is this scheme? We do not know, but we feel sure that if the old Board were elaborating any important scheme it will be quite safe in the hands of the new Board. There are points of less importance on which we need not touch here beyond saying in general terms that the critic appears to have formed a hasty opinion based on insufficient information. We should advise him to suspend his judgement till the full details of the new scheme are before the public.

#### HOSPITAL FINANCE.

EARLY in 1905 a series of articles was published in this JOURNAL on the expenditure of hospitals, and in their course it became necessary to consider the methods by which hospital accounts are commonly kept. It was shown that the prevalent system was full of pitfalls, and that any conclusions based upon accounts so kept must be full of fallacies, and especially misleading when it was attempted to compare the administration of one hospital with another. Very shortly afterwards it was made known that King Edward's Hospital Fund for London had decided to take the matter in hand, and work on the subject was commenced by it almost at once. We now have the net outcome in the shape of a red book entitled *The Uniform System of Hospital Accounts*,<sup>1</sup> which is issued under the joint authority of King Edward's Hospital Fund for London, the Metropolitan Hospital Sunday Fund, and the Hospital Saturday Fund. This fully describes what from the present time must be regarded as the authoritative system of hospital account keeping. Apart from the fact that the three funds, and probably all funds throughout the kingdom, will insist upon medical charities keeping their accounts in the manner now prescribed, the methods recommended are the outcome, first of a report and recommendations made by a chartered accountant, Mr. J. G. Griffiths; and, secondly, of a consideration of those recommendations by a number of hospital secretaries, who were elected for the purpose at a meeting of hospital secretaries convened by the three funds on March 1st, 1906. Naturally this red book, dealing as it does chiefly with forms of account keeping, does not lend itself to summary, and it will be sufficient to say that the objections to which we drew attention in the old system appear on examination to have been remedied. Hence, it will now be possible, not only to ascertain the true expenditure and true income of any institution during any one year, but also to compare the efficiency of administration of one hospital with another, so far as the latter can be discerned by an exact comparison of their respective outlay on each bed occupied throughout the year, and on each out-patient treated. The report contains, however, some matters of wider interest; thus, the precise meaning of certain terms in common use when hospital administration is under consideration is clearly

defined. It is laid down that an in-patient is a person who is recorded in a book kept for that purpose, as having been an inmate of the hospital at a fixed hour of the day, which hour when fixed shall not be changed throughout the year, and that an out-patient is a person attending continuously for the same ailment, for however long a period, between January 1st and December 31st inclusive. A casualty patient must be regarded either as an in-patient or an out-patient; if taken in, he must count as an in-patient; if treated and sent home, he must go to the out-patient account. The intention is to prevent, as far as may be, any person figuring more than once in the year in the statistics of any hospital. On the whole, it seems likely that the general result will be an apparent fall in the amount of out-patient work done by the London hospitals, and as a number of agencies are now at work with a view to reducing hospital abuse, and therefore the extent of the work carried on in the out-patient departments, it will be necessary in the future, in considering what success they have had, to keep in mind the introduction of this new rule. Another interesting document recently issued by the King's Fund relates to the expenditure of sixteen large general hospitals in London during 1905. This is the first complete year that has elapsed since hospitals have been in possession of the facts brought to their notice by the King's Fund with reference to the very different rates paid by different institutions to contractors for the same articles. The net result is that there has been a saving during the year of over £20,000 on such expenditure as the authorities can be expected to control. A short calculation shows that the greater part of the saving has been effected on provisions, and the rest on surgery and dispensary outlay and on wages.

#### PHYSICAL DEVELOPMENT AND SCHOOL LIFE.

IN commenting last week upon the paragraphs on medical inspection of school children contained in Dr. Kerr's annual report to the London Education Committee, it was stated that the report contained so much valuable matter that it would not be possible to deal with the whole in a single issue, and a note upon the results of the physical examination of some 20,000 children in London elementary schools is published this week (p. 153). The statistics deal with height and weight, which are found to correspond in the various school standards and in the various classes of children to a rather surprising extent, and fully justify the stress which Dr. Kerr lays upon the importance of home conditions in influencing height and general physical and mental development. The different schools selected varied very markedly as regards the stamp of children who attended them, some being extremely poor, while others came from comfortable homes where they were well nourished and looked after. Periodical weighing and measuring gives a very good idea as to whether the child is making fair growth and increasing sufficiently in weight. The home conditions may be guessed pretty accurately from the child provided it is not kept back by some physical defect or illness. In any anthropological survey made on broad lines of collective groups of children, the district from which they come would naturally matter very much. An interesting fact brought out in the report is that the children who are tallest and strongest physically have evidently the better mental development also, the taller children being in higher standards than the short of similar age; so pronounced is this difference that a group of children of a given age in a given school standard are on the average shorter than groups of children in higher standards but one or more years younger. The difference is probably an expression in part of the

<sup>1</sup> G. Barber, 23, Furnival Street, Holborn, price 1s. post paid.

influence of heredity, and in part of the power of the environment in the home and at school. Dr. Kerr regards the influence of the home conditions as pre-eminent, but, as he admits, a true appreciation of the inter-relation of hereditary and social conditions on the one hand, and educational results on the other, must be founded not merely on impressions—useful though they may be as guide posts—but on scientific data as to individual children, permitting a comparison between physical and mental development, and home conditions as to feeding, sleeping, and housing, as well as to heredity. Dr. Kerr goes no further than to assert that the school is to the home “an auxiliary, sometimes an ameliorating influence.” But we venture to suggest that the school must have, and ought to have, directly and indirectly, a very far-reaching influence. If the head teacher of a school has the wisdom and the tact to point out to the parents the necessity of co-operating by allowing their children wholesome food, proper sleep, and herself watches the health and cleanliness of the children in the school, the effect must be so considerable that it would not be surprising if inquiry showed that the children physically and mentally the best developed were those attending schools under the charge of such head teachers. There is room for simple and clear lectures, at which mothers and teachers could meet and after the lecture talk matters over rationally. Meanwhile, these inquiries are most useful, inasmuch as they help us to realize what is and what is not immediately practicable in this very important part of public health administration.

#### THE TORONTO MEETING.

WE learn from the *Canadian Journal of Medicine and Surgery* that the various Committees of the Toronto Meeting have wound up their business. In every case they have had good reason to congratulate themselves on the result of their labours. The Committee on Exhibits turned over the splendid sum of \$3,714.03 (about £743) to the Treasurer, Dr. J. F. W. Ross—a surplus which it is claimed holds the record of any annual meeting of the Association up to date. It is stated that any surplus which may remain in the hands of the Executive, after paying all accounts, will be presented to the Ontario Medical Library Association for further improvements to the building and the purchase of new books. To the *Liverpool Medico-Chirurgical Journal* for January Sir James Barr contributes some interesting reminiscences of the meeting. He says it will long be remembered by those who took part in it as one of the largest and most enjoyable ever held in connexion with the Association. The organization was perfect, every detail had been thoroughly thought out beforehand, and there was no hitch from beginning to end. The Toronto members were determined to make the meeting a great success, and to see that every one attending should have cause to retain a pleasant recollection not only of their great city, but of the Dominion of Canada, and in this they were completely successful. After giving a summary of the work of the meeting, Sir James proceeds to give his impressions of Canada. Of Toronto he says, among other things, that it is the largest city in the leading Empire of the world; it is the leading agricultural centre in the Empire, and there is held annually the largest agricultural and arts fair; it is the greatest fresh-water city in the Empire; it is the most temperate city in the English-speaking world; it has the finest choir on the American continent; and it is the educational centre of Canada. Ontario, he says, has more fresh water for power purposes than any country in the world. The Niagara Peninsula, Ontario, is one of the greatest fruit districts in the world. In the

English-speaking world Canada, per caput of population, does the greatest import and export trade. Canada is larger than the United States, and in Sir James Barr's opinion will in another half century be as great a country. When, he asks, will Englishmen awake to the opportunity of taking part in the colonization of this great country? The province of Ontario is largely Scottish, and the American farmers are coming over every year in their thousands to cultivate the fertile lands of the West. The more barren province of Quebec is chiefly occupied by the French, and in their territory Sir James Barr did not notice much progress since his visit nine years previously. They are chiefly remarkable for their large families; and at their present rate of multiplication they might soon overrun Canada and the whole of America were it not for their high death-rate. The Canadians, so far as he came across them, are a vigorous, active, stalwart, generous, hospitable race. They are exceedingly temperate, but they do not go about with blue ribbons in their coats. While the Canadians are very temperate both in meat and drink, the Americans, according to Sir James Barr, are temperate only in their drink, because the struggle for existence is so keen that they cannot afford to be otherwise. On the other hand, it seemed to him that the Americans are very intemperate in their food, and that Professor Chittenden is merely the voice of one crying in the wilderness. The Canadian and American women are well made, handsome, and well fitted to become fruitful mothers, if Nature had full swing. Sir James did not come across any miserable degenerates of either sex. He also visited the States, and was very favourably impressed, not only with the grandeur and magnitude of the country, but with the people themselves, their enterprise, their great hospitality and kindness.

#### THE HISTORY OF SPECTACLES.

AT a recent meeting of the Berlin Society of the History of the Natural Sciences and Medicine, Professor Julius Hirschberg presented a communication dealing with the history of the discovery of spectacles. He said that lenses for the improvement of the visual power were unknown among ancient peoples, whether Egyptians, Greeks, or Romans. They knew and used the art of polishing glass and rock crystal, but they were unacquainted with the use of these substances as aids to the eye. This is shown by many passages in Pliny and Seneca. The Emperor Nero had a smaragdus which he used as an eyeglass, but it is not clear whether or not it was a concave lens. The Chinese and Arabs had no earlier knowledge of spectacles than Europeans. The Chinese, indeed, long before the Christian era, had various kinds of concave mirrors, but they did not use them as spectacles. The statement of a French investigator that spectacles are an ancient discovery of the Chinese is erroneous, and according to Professor Hirschberg it is certain that spectacles were introduced into China from Europe in the fifteenth century. In the Talmud there is no mention of spectacles. The first certain reference dates from the year 1270. The English man, Roger Bacon, seems to have been the first who did anything towards the discovery of spectacles. He lived from 1214 to 1294, studied at Oxford and Paris, and taught at Oxford, where his learning gained for him the name of Doctor Mirabilis. He determined the position of the focal point in spherical concave reflectors, and gave directions for the making of parabolic burning glasses. In 1267 he had to clear himself from a charge of being a magician. He did this in his *Opus Majus*, in which he set forth his numerous optical experiments and discoveries. In it he speaks of magnifying glasses, which he said were useful to old people by making them see better. We hear in

this book for the first time of the magnifying glass and its use. The actual discoverer of spectacles was probably Salvino degli Armati, a Florentine nobleman who died in 1317. Much was done for the popularization of spectacles by the Dominican friar, Alexander von Spina, who died in 1338. The spectacles first constructed were convex, and there is proof of their use since the middle of the fourteenth century. We hear first of concave glasses for short-sighted persons about the middle of the sixteenth century. Cylindrical spectacles first came into use in the nineteenth century. The first spectacles were hung from the cap; later the bridge of the nose was utilized as a support for the frame. The German word *Brille*, for spectacles, comes from the Latin *beryllium*, which in the Middle Ages was equivalent to glass, and may be traced back to an Indian root. Professor Hirschberg points out that some painters of the sixteenth century who represent persons of early Christian times as wearing spectacles on their noses, were guilty of an anachronism. He adds that the notion which prevailed so long that St. Jerome, who lived in the fourth century, was the discoverer of spectacles is altogether unfounded.

#### THE "REVIVAL" OF HOMOEOPATHY.

IN the *Monthly Homoeopathic Review* of December 1st Dr. George Burford takes rather a gloomy view of homoeopathy in this country. The state of things, we gather, is different in America, but in England it is not satisfactory. Look, we are told, at the chemists: "*Eight homoeopathic pharmacies in London have closed their doors within the last few years.*" (The italics are the author's.) In the provinces "a parallel state of suspended animation is demonstrable." This is significant in itself; but it becomes doubly significant when it is considered that, as we learn from Dr. Burford, the chemist is one of the best propagandist forces of homoeopathy. In the face of this fact it is somewhat surprising to be told that while homoeopathic chemists are diminishing, the homoeopathic laity is increasing. Although the hungry sheep look up and are not fed, nevertheless they increase and multiply! This is all the more strange, since "touch has been lost in some way between the chemists and much of the homoeopathically-inclined laity." Twenty years ago "innumerable households" were supplied with homoeopathic weapons against the ordinary minor ailments of the home. The pocket case and medicine chest were well to the fore in many households not "fully homoeopathic." Even homoeopaths have some elements of human weakness in them, and it is scarcely surprising that the disciples of Hahnemann did not altogether approve of the way in which the chemist tended to displace the doctor. Dr. Burford, however, pleads that in consideration of their value as propagators of the faith some latitude should be left them. We think it not unlikely that they will take this latitude, whether or not it is allowed them by the doctors, for after all under a system in which the be-all and the end-all is the administration of drugs in such doses that they can never produce injurious effects, it is the chemist only that is necessary; the doctor is a superfluity. Dr. Burford asks where in the present revival of homoeopathy the homoeopathic chemist comes in? It would, perhaps, be more to the purpose to inquire where, in the face of Dr. Burford's own statements, the "present general revival" comes in? He tells us that ten years ago the members of the British Homoeopathic Society resident in the British Islands numbered 205; "to-day they total some 190." The proportion to population a decade back was 1 to 150,000; in 1906 it was 1 to 180,000. If this be a sign of a general revival, we are curious to know what Dr. Burford would regard as decay. "In the earlier days of homoeopathy," he says, "converts were not infrequent among

"professional men in good practice. Of late years this method of accession to the homoeopathic ranks has fallen into desuetude." Why? Because "the introduction of antiseptic surgery has turned the attack and saved the allopathic situation." Antiseptic surgery, we are asked to believe, "by diverting attention from the parlous state of orthodox medicine, has staved off for a few decades the dominance of homoeopathy all along the line." Moreover, medicine is becoming "homoeopathized." Assuming this to be true, we should have thought our separated brethren would have hailed with pleasure their coming absorption into the unity of scientific medicine. As they themselves admit, however, they regard the possible predominance of the "truth" with dismay, for they know their occupation would be gone. The strength of their position lies in its being outside the fold of orthodoxy; this appeals to the popular instinct, which is always "agin the government." Dr. Burford charges the body of which he is an ornament with "supineness." They do not proselytize; they even throw cold water on the aspirations of young men to enter the homoeopathic body. Dr. Burford advocates a more forward policy. If the medical donkey will not go to the Hahnemannian well, he must be taken to it, or rather it must be taken to him. The "allopath" must be bombarded with samples of homoeopathic drugs; he must be deluged with statistics, "permeative" pamphlets, and other literature setting forth the sweet simplicity and other charms of homoeopathy; "these must be crowded on his unwilling notice." Dr. Burford seems to forget the maxim:

Convince a man against his will,  
He's of the same opinion still.

He calls on John Bull to "wake up." Notwithstanding the "general revival" there would seem to be much need of this. The British Homoeopathic Association, "recognizing the importance of the crisis," has sketched out a plan of campaign for the propagation of its doctrines. All the homoeopathic bodies and forces in the country are to be co-ordinated, and the machinery of education created. A school of homoeopathic medicine is to be founded; professors are to be appointed; and last, but not least, students are to be found. This does not seem to be altogether an easy matter. "We are committed for many reasons and for many years to come to post-graduate work." Even post-graduates desirous of knowing what homoeopathy is and does "do not as a class exist." The desire has to be created. Evidently homoeopathy needs a deal of reviving.

#### THE STANDARDIZATION OF CURATIVE SERUMS.

DR. OTTO has published<sup>1</sup> a concise account of the methods employed at the Frankfort Institute for the official testing of samples of curative serums. In order to ascertain if the serum is free from noxious contents it is first subjected to a naked-eye inspection, and if it is turbid it is rejected. The sterility of the serum which appears clear is tested by inoculating agar, grape sugar bouillon, and grape sugar agar culture media, each with 5 drops of the sample. The absence of an excessive amount (that is, over 0.5 per cent.) of an antiseptic such as phenol is determined by subsequently inoculating a mouse with 0.5 c.cm. of the liquid, which ought not to produce in the animal any marked symptoms of intoxication. As a further precaution, in order to avoid all risks of such unfortunate accidents as have occurred in America and Italy, the absence of tetanus toxin or tetanus spores is ascertained by inoculating 10 c.cm. of the serum into a guinea-pig. For the standardization of diphtheria

<sup>1</sup> *Arbeiten aus dem königlichen Institut für experimentelle Therapie zu Frankfurt a. M.* Herausgegeben von Professor P. Ehrlich. Heft 11. *Die staatliche Prüfung der Heilsera.* Von Dr. R. Otto. Jena: Gustav Fischer. 1906. (Demy 8vo, pp. 86, with 8 illustrations. M.3.)

antitoxin Ehrlich's method is adopted, according to which a standard of antitoxin instead of toxin is employed. This method, now followed in most countries, differs in some respects from the procedure observed in the Pasteur Institute, and, Dr. Otto thinks, compares favourably with it. In the examination of tetanus antitoxin von Behring's method is closely followed. This is a more complicated piece of work than in the case of diphtheria, and one of the difficulties which have to be contended with is the unstable character of the toxin of tetanus. It is not, therefore, to be expected that manufacturers will be able to standardize their tetanus antitoxin with absolute precision. The standardization of antibacterial serums is beset with difficulties. Various methods have been proposed, and the attempt has been made to measure the potency of these serums by means of the substances which are termed by Wright "opsonins" and by Neufeld "bacteriotropins." But, as Dr. Otto points out, tests like these, which depend on reactions brought about outside the living body, cannot be regarded as commensurate with all the factors which determine the value of a serum as an actual curative agent. It is therefore necessary to rely upon animal experiments, and Dr. Otto has in many instances found it particularly useful to employ mice for this purpose, owing to the uniformity of their resisting powers. In addition to testing many serums for which antibacterial properties are claimed, including an antidysentery serum and an antistreptococcus serum, the Frankfort Institute has dealt with the standardization of tuberculin and "tauruman," the latter being an emulsion of living tubercle bacilli of the "typus humanus" intended for the purpose of immunizing cattle.

#### A SURGICAL SHOWMAN.

In a recent number of the *Deutsche medizinische Wochenschrift*, Dr. Torkel gives an account of a cinematographic exhibition of surgical operations which he had an opportunity of witnessing in a "bioscope theatre" at Freiburg in Baden some weeks before. The various "turns" were introduced with the usual blatant announcements. The show comprised views of the operating table; of the table with a naked woman lying on it; of excision of the knee-joint; of incision of the brain through a large opening in the skull; of an operation on the bladder; and of an abdominal operation. The showman named as the operator a well-known surgeon, and Dr. Torkel says this statement was confirmed by the startling technique and, as far as he could judge from portraits, the striking likeness. The rapidity of the performance appeared to be increased by the quick working of the mechanism. The impression made by the operation was that of a man whose main object was to display his dexterity, and to whom the good of the patient was a secondary consideration. This impression was shared by members of the general public, as Dr. Torkel gathered from what he heard from those sitting near him. The abdominal operation, which was performed on a woman, was, owing to the profuse bleeding, so ghastly that many people left the theatre. No doctor with any regard for the dignity of his profession could, says Dr. Torkel, fail to be disgusted at the manner in which the medical art was profaned in this case. He lays stress on the evil influence which such spectacles in such cases must have on adolescents, who were present in large numbers, and he calls on the authorities to put them down. He does not mention the name of the operator who prostituted his art to such base uses for the satisfaction of his vanity. It may, however, be surmised that it was a certain famous Paris surgeon who is known to have allowed himself to be photographed while operating. His exhibitions of cinematographic surgery have before

now figured among entertainments of the music hall order, and it is said that he was hissed at Brussels, where he gave a surgical address illustrated by such pictures. The cinematograph has its place in scientific demonstration, but displays such as those here referred to are, owing to the lightning rapidity of the procedure, useless for such a purpose. As public spectacles they are degrading to the operator and demoralizing to the spectators.

#### TORSION OF A HYDROSALPINX.

TORSION OF the pedicle of a hydrosalpinx may now be reckoned as a well-established new disease. It was first noted by Mr. Henry Morris and Mr. Bland-Sutton in 1891, then several cases were recorded by French and German authors, and in 1904 an excellent monograph on the subject by Dr. Hamilton Bell was read at a meeting of the Obstetrical Society of London. Dr. Bell found that already 50 cases had been reported. The chief point of interest to the physician and practitioner is the acuteness of the attack, in many cases simulating appendicitis, (or more often torsion of the pedicle of an ovarian tumour. Another frequent experience is the co-existence of pregnancy with twisting of the hydrosalpinx. On the other hand, Albert Martin<sup>1</sup> has reported an instance of torsion of a hydrosalpinx in a non-gravid subject being taken by the patient herself for threatened abortion. The history was [remarkable: the patient, 34 years old, had suffered nine years previously from a violent attack of pain in the hypogastrium, chiefly towards the right side, with abdominal distension. She kept her bed for a month, and recovered spontaneously; no diagnosis being made. The illness which led her to consult Dr. Martin was a return of the abdominal distension, with diminution of the catamenial flow. On this occasion the acute attack followed instead of preceding the distension. It came on when the patient was finishing her lunch, and was very severe, chiefly in the right iliac fossa, radiating down the lower extremity. As she had suspected pregnancy, the acute attack was taken by the patient for threatened abortion. On examining the pelvis Martin detected a tender swelling in the right fornix, reaching into Douglas's pouch. It suggested torsion of the pedicle of a small ovarian cyst. Abdominal section was performed, and a large hydrosalpinx of the right tube was discovered. It resembled superficially a coil of distended strangulated intestine, and was twisted two turns on its pedicle. It is significant that there were no adhesions, and as dilated tube is very common but not often twisted, yet usually more or less adherent to adjacent structures, the cause of the relative rarity of torsion is clear. Ovarian cysts often rotate on their pedicles, but they are much heavier than tubes and therefore not so readily fixed by adhesions. An instructive discussion followed the reading of Dr. Martin's monograph. Siredey related a case where a lady was attacked suddenly with "enteritis" when at a watering place. A tumour was detected; it proved to be a large hydrosalpinx with twisted pedicle.

#### SANITATION IN EL SALVADOR.

OF all the Central American Republics, El Salvador, which we in England almost invariably misname San Salvador, is certainly one of the least known. To the seaman navigating the Pacific, and perhaps to the pharmacologist also, if he should chance to interest himself in matters geographical, the Republic is known as the Balsam Coast, for here is grown, and net in the country to which it is accredited, the so-called balsam of Peru of our *Pharmacopœia*. Though so far from the

<sup>1</sup>Torsion du pédicule d'un hydrosalpinx droit, *Comptes rendus de la Soc. d'Obstét. de Gynéc. et de Pœd. de Paris*, July, 1906, p. 147.

great centres, the country is rather thickly populated the vast majority of the inhabitants being Indians. The capital, San Salvador, nevertheless boasts a "Consejo Superior de Salubridad," and in its Bulletin, which we have now for the first time received, some interesting details are given of the malarial and other insanitary conditions prevalent in Santa Ana, an interior town of some 53,000 inhabitants. A Commission was appointed a short time ago to investigate the causes to which these were due, and the results are now published. The most common maladies were found to be bilious remittent, tertian, and quartan fevers, and infectious dysentery. From an analysis of 7,200 cases of paludism, it appears that only about 1.5 per cent. were fatal, but it was found that the total proportion of persons affected with malaria to the entire population of the town was 69 per cent.; in other words, that practically two out of every three persons in the place were fever-stricken. The disease was most prevalent in the neighbourhood of slaughterhouses, tan yards, and coffee factories, where abundance of larvae of various kinds of mosquitos and of sarcophaga were discovered to exist. The tertian and quartan forms were found to correspond in a remarkable manner to the two seasons, dry and wet, into which the climatic year of El Salvador is divided.

#### SECRETION OF MILK IN THE AXILLA.

THE existence of supernumerary nipples and of axillary mammae in some women has long been known. A good monograph on the subject was read by Dr. F. H. Champneys twenty years ago at a meeting of the Royal Medical and Chirurgical Society.<sup>1</sup> Dr. Seitz, of Munich has quite recently reported two cases of secretion of milk from the axilla.<sup>2</sup> In both subjects a painful swelling, quite distinct from the mammary gland, developed on the fourth day of the puerperium. It grew larger for two or three days, until it filled the axilla; on palpation glandular tissue could readily be defined. The mass could be moved over the subjacent tissues, and the integuments were not reddened, although some dilated veins could be seen as in a normal breast during lactation. In one patient there were two or three minute nipples of the size of a pin's head; in the other no trace of a single supernumerary nipple could be detected. By gentle pressure large drops of a white secretion could be pressed out of the pores of the skin in both subjects and out of the nipples in the case where they existed. This process gave great relief, and the secretion proved to be milk. Our readers may remember Cameron's case, where the patient when pregnant became aware of a swelling in the left axilla after physical fatigue caused by carrying several buckets of water during a fire. In the puerperium milk could be pressed from this swelling as in Seitz's cases. There was some discussion when Dr. Seitz read his report before a society. Supernumerary nipples and aberrant mammary glandular tissue are not quite homologous. Dr. Mitchell Bruce's writings on nipples are still well known; they often appear along the line of the normal nipples in the lower mammals, but purely morphological theories will not always account for the appearance of nipples in very abnormal positions. Mammary gland tissue has been detected by Amann in the subcutaneous tissue of the groin in the human subject; in the lower animals this condition is yet more frequent. He associates the inguinal mammary tissue with certain solid tumours of the round ligament occupying the inguinal canal. Dr. Seitz noted how his two cases had been under observation in the same hospital almost at the same time, the first turning attention to the second. It is

<sup>1</sup> On the Development of Mammary Functions by the Skin of Lying-in Women, *Med. Chir. Trans.*, vol. lxxix, p. 419.

<sup>2</sup> Zwei Fälle von Milchsekretion aus der Achselhöhle, *Monatsschr. f. Geb. u. Gyn.*, August, 1906, p. 266.

therefore probable that the condition in question is not so rare as is supposed, cases where pain is absent being overlooked.

#### TRICHOCEPHALUS DISPAR.

THE general opinion of the profession, as was observed in a paragraph on the association of trichocephalus and appendicitis in the BRITISH MEDICAL JOURNAL of August 4th, 1906, would seem to be that this intestinal worm is not common in the British Isles. Our attention has been turned to a communication made recently by Drs. H. S. French and A. E. Boycott, the result of work in the Gordon Laboratory, Guy's Hospital.<sup>1</sup> They examined microscopically the stools of 500 in-patients at the hospital, without selection of any class of disease. A small portion of faeces was shaken up with normal saline solution in a test tube; half an hour later the supernatant fluid was poured off, and the deposit shaken up with fresh saline. This process was repeated about five times, so that all the finer sediment was removed; one drop of the final deposit, presumably containing the eggs in a concentrated form, was mounted fresh; then any eggs that happened to be present were readily detected under a low power. Eggs of parasites were found in 40 out of the 500 cases. In no less than 39 they were the ova of *Trichocephalus dispar*. In the remaining case the eggs of *Ascaris* were discovered, with difficulty, in the faeces of a boy aged 6 admitted as a case of ascaris infection. The eggs of trichocephalus were never detected where the patient was under 4 years old, although 42 infants under 5 came within the series. Males and females proved, according to these researches, to be equally liable to the parasite. The trichocephalus was not associated with any particular disease. Of 24 cases of appendicitis, 2, or 8.3 per cent., had the parasite; yet the average incidence was 9.4 per cent. Thus, the authors remark, referring to Metchnikoff as well as to their own results: "No support is afforded to the notion that trichocephalus has any etiological relationship to appendicitis." The egg is very tenacious of life, and infection arises from the ingestion of material contaminated with stale human faeces. Uncooked vegetables are the readiest agents of infection. Drs. French and Boycott believe that watercress is specially dangerous. It is much consumed by the poorer classes in London, and is often obtained from sources open to the gravest suspicion of sewage contamination. The profession would be interested in a monograph of a similar character enlightening it about the adult trichocephalus in subjects living in this country. Let those who would make researches bear in mind that the authorities whom we have quoted warn us that the presence of the common oxyuris is often missed by the ordinary methods of examination of faeces. On the administration of thymol the worm and its ova were nearly always detected after almost uniform failure before that drug was administered.

#### THE MOTOR AS A DISINFECTING MACHINE.

WHETHER the motor will in time altogether replace the horse in medical practice, there can, we think, be no doubt that it has come to stay. Readers of the BRITISH MEDICAL JOURNAL have from time to time the opportunity of learning the experiences of some of their professional brethren with motors of various types. We do not propose here to discuss either the general question of the usefulness of the motor in practice or the relative advantages of the products of different makers. We wish to call attention to an indictment against the motor in respect of its effect on the steadiness, and what is still more important, the cleanliness, of the surgeon's hand, which has recently been made in France. It is said that if a surgeon or obstetrician

<sup>1</sup> The Prevalence of *Trichocephalus dispar*, *Journal of Hygiene*, July, 1905, p. 274.



drives his own motor he is liable to become the subject of trembling of the hands, which must be a serious drawback in the practice of his art. It is further alleged that the manipulation of the machine must contaminate a practitioner's hand. The motor has found a defender in Dr. Fieux, *agrégé* professor of obstetrics in the Medical Faculty of Bordeaux. He points out that trembling of the hands is not likely to occur except in men of highstrung nervous temperament, who by that very fact are unfitted for the habitual performance of surgical operations. On this count, we think this indictment breaks down. The second charge is more serious, but appears to be no better founded. Dr. Fieux asked his colleague, Dr. Sabrazès, to examine dust and oily particles carefully collected by means of sterilized pipettes from under the hood of a motor. The microscope failed to reveal any micro-organisms whatever, and cultivations gave absolutely negative results. This would seem to show that, so far from being an agent of contamination, the motor, by the heat which it generates, actually disinfects the dust and other foreign matter which comes in contact with it as it rushes along. If this can be shown to be true, the motor would cease to be the nuisance it too often is to all but those whom it carries, and people half suffocated by the clouds of dust which it raises would, at any rate, have the comfort of believing that the matter which chokes their lungs is aseptic.

#### STREETS NAMED AFTER DOCTORS.

Is there in the whole of our island a street named after a doctor? We know of none. In other countries such a recognition of medicine is common enough. This is particularly the case in France, where, for instance, in the small town of Ax, no fewer than four streets bear the names of doctors. We lately had occasion to mention that the name of the famous Spanish anatomist, Professor Ramon y Cajal, has been given to a street in Madrid. Quite recently two thoroughfares in Lisbon have been named respectively after Professor Manuel Bento and Professor Serrano. The boulevard which the City of Boston is to build in front of the new Harvard Medical School buildings is to be called the Avenue Louis Pasteur. All the names which bulk large in the medical history of the United States had been considered; and as it was found that nearly all prominent Americans had received recognition of some sort from Boston, it was decided to recognize the great French discoverer, who, though not a member of the medical profession, was one of the master builders of the Temple of Medicine. Our own city Aediles are often perplexed about the naming of streets, and if the innumerable King and Queen Streets show a spirit of loyalty they also display a sad poverty of invention. We suggest to the London County Council that by choosing such names as Jenner, Lister, and Simpson for their streets they would vary the monotony of their nomenclature and perhaps do something to impress the importance of medical research on the public mind.

#### MEDICAL CHARITY AND SICKNESS ASSURANCE.

As already announced in the BRITISH MEDICAL JOURNAL of January 5th, a special meeting of the Marylebone Division will be held in the rooms of the Medical Society, 11, Chandos Street, Cavendish Square, W., on Thursday, January 24th, at 8.30 p.m., when the second of a series of discussions on economic problems in relation to medicine will be held. The following resolution will be submitted: "That the development of properly-organized systems of mutual assurance for the cost of illness offers the most readily available method of reducing the admitted evils of excessive medical charity and the misuse of hospitals." The debate will be opened by Dr. R. C. Buist, Mr. H. W. Armit, Mrs. Scharlieb, Dr. L. S. McManus, and Dr. J. H.

Keay. A summary of the points with which Dr. Buist and Mr. Armit propose to deal will be found in this week's SUPPLEMENT, at p. 28.

#### THE EDALJI CASE.

WE publish elsewhere in this issue an appeal from Sir Arthur Conan Doyle to ophthalmic surgeons for an expression of their expert opinion as to the useful vision possessed by eyes presenting the degree of myopic astigmatism ascertained to be present in the case of Mr. George Edalji. The motive of this appeal will, of course, be generally understood, for Sir Conan Doyle's cogent articles in the *Daily Telegraph* have been generally quoted in the daily press. He believes that Mr. Edalji was wrongfully convicted, and the sentence has already been reviewed by the Home Secretary, for Mr. Edalji was liberated after serving three of the seven years to which he was condemned. The evidence against him was circumstantial throughout, and it must therefore be rebutted by evidence of the same character. To reach the field in which was the pony Mr. Edalji was convicted of maiming, he must, on a dark night, have walked rapidly across fields, over fences, and across a broad railway line, and have returned with equal speed. The degree of myopia found to be present is high and complicated by astigmatism in one eye, and it is astonishing that spectacles to correct it had not long before been obtained, but Mr. Edalji had been a law student and had subsequently practised as a solicitor, so that as the refraction error would not seriously interfere with reading it may be that he felt comparatively little inconvenience from the defect. At any rate there seems no doubt that he did not wear glasses. Communications may be addressed direct to Sir A. Conan Doyle at the address given, or if sent to us will be forwarded.

THE question of the *de novo* origin of bacteria, bacilli, vibriones, micrococci, torulae, and moulds in certain previously superheated saline solutions contained within hermetically-sealed tubes, will form the subject of a paper to be read by Dr. H. Charlton Bastian at the meeting of the Royal Medical and Chirurgical Society on Tuesday next, January 22nd.

THE Governor of Jamaica, in a telegram dated January 14th, informed the War Office that the Camp Hospital was destroyed by the earthquake on that day, that 30 inmates were killed, and that the medical officer, who is apparently Lieutenant H. C. Sidgwick, M.B., R.A.M.C., was so seriously injured that he must be immediately replaced. The hospital is no doubt that at Up Park Camp, used for men of the West India Regiment. In a communication to the Colonial Office, apparently dispatched at a later date, the Governor adds that the Myrtle Bank Hospital has been destroyed, that the number of killed and wounded in the town had not been ascertained, but that the Town Hospital was crowded with some 300 persons. There is no Myrtle Bank Hospital, and the building referred to is no doubt the hotel of that name.

ON the occasion of his recent visit to Chatsworth the King conferred the decoration of the Cross of the Victorian Order (M.V.O.) upon Mr. E. M. Wrench, F.R.C.S., of Baslow. Mr. Wrench, who has been Surgeon to the Dukes of Devonshire since 1862, served as Assistant-Surgeon to the 34th Regiment in the Crimea, and with the 12th Royal Lancers during the Indian mutiny. Mr. Wrench was President of the Midland Branch of the British Medical Association in 1899, and his address, published in the BRITISH MEDICAL JOURNAL of July 22nd of that year, dealt with the lessons of the Crimean war. Mr. Wrench was formerly Surgeon-Lieutenant-Colonel in the 2nd V.B. Derbyshire Regiment, and already possesses the Volunteer Decoration.