College of Physicians, Kildare Street, Dublin,
June 5th, 1890.

From the President Dublin Branch, British Medical Association.
To the Secretary of State for War, War Office, London.

SIR,—With reference to the enclosed resolution which was unanimously adopted at a meeting of this Council, held at the College of Physicians, on the 3rd instant, I am directed to inform you that this Council, representing members of the British Medical Association, begs strongly to urge on you the necessity that exists for allaying the present state of discontent prevailing among the officers of the Medical Staff of the Army.

This Council considers this can best be done by adopting in their entirety the recommendations made by the Parliamentary Committee presided over by Lord Camperdown.

I have also to point out that the Parliamentary Committee in question having heard the evidence, not only of the officers of the medical staff, but also of "your military advisers," were thus able to form an unbiassed opinion, which opinion should not, this Council considers, now be lightly set aside. In conclusion I beg to inform you that the feeling of unrest and discontent engendered in the minds of officers of the medical staff, a result of the uncertainty of their prospects and ill-defined position in the army, is fast spreading to the medical schools in this country, the consequence of which will be an almost certain falling off in the number and quality of candidates for the Army Medical staff.—I have the honour to be, etc., JOHN KELLOCK BARTON,

President, Dublin Branch, British Medical Association.

The representations on this subject made to Government culminated in the reception of influential deputations by Ministers, on May 15th, 1893. The deputations consisted of old and distinguished army medical officers, as well as of civil representatives of the profession, headed by Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee of the British Medical Association. They were received by Mr. Campbell-Bannerman, Secretary of State for War, and by the Right Hon. the Earl of Kimberley, Secretary of State for India.

The subjects particularly urged on the War Minister were: The formation of a consolidated medical corps, with revision of titles, a change in itself which would cover many of the disabilities under which the medical service labours, and would undoubtedly greatly enhance efficiency; reversion to three and five years' tours of foreign service, as it is found that six years' tours in India are operating most disastrously on the health, mortality, and consequent efficiency of the officers; revision of the rules of retirement in the higher grades, the three years' service in a rank before pension can be claimed causing stagnation and disorganisation in the administrative ranks; the financial extension of warrants to India—a matter most pressing, not merely in view of the alarming depreciation of the rupee, but on its own merits of justice and good faith, which cannot be long denied or delayed without affecting the popularity of the medical staff, on which the pressure of the Indian service is telling severely. The details of medical officers for service in India, study time on full pay, exchanging, and other matters, were also touched on. On the Indian Secretary the subjects more closely affecting his department immediately were naturally urged.

The replies of Ministers, if not entirely satisfactory, were generally sympathetic, and the broad results of the deputations were such as to lead to anticipation that the revision, at least of some of the conditions complained of, will not be long delayed.

Another topic which has engaged the attention of this Branch was the registration of midwives. At the annual meeting in 1891 the following resolution was adopted on the motion of Dr. Atthill: "Resolved, that, in the opinion of this Branch, the registration of midwives, as proposed in Parliament, will not tend in any marked degree to render more efficient the nurses practising as midwives, unless steps be first taken to improve their education; that the question of registration should be postponed till it is shown that facilities exist for the education of such women as may desire to practise as midwives; and that the proposed registration of all women as midwives would be a most dangerous proceeding."

It will be remembered that, as the outcome of the agitation on the subject, a Select Committee of the House of Commons was appointed early in the session of 1892 to take evidence relating to the registration of midwives. On May 3rd of that year Dr. Atthill was requested to give evidence before that Select Committee as representative of this Branch, and this he afterwards did.

The Council of the Branch has also heartily co-operated with the Therapeutic Committee of the parent Association.

On November 12th, 1891, the Council appointed a Therapeutic Subcommittee, consisting of the President (Dr. Walter G. Smith), Dr. Duffey, Dr. Finny, Dr. Conolly Norman, and Dr. Tichborne.

At a meeting of the Subcommittee, held January 7th, 1892, the schedules forwarded by Dr. Martin, Secretary to the Central Therapeutic Committee, relating to the action of nitrites on dyspnoea were considered, and Dr. Tichborne undertook to report on the nitrites in question.

The foregoing record of work done or in progress should, I think, satisfy the most captious critic that there is a reason for the existence of a Dublin Branch.

Why, then, is not our Branch better supported, and its membership more prized? Considering the work which has already been done, directly or indirectly, through the agency of the Branch, the answer to this question is not easy; and I will not try to answer it. Rather would I appeal to the 220 unattached members of the Association, who live in or near Dublin, to enrol themselves without delay in the ranks of this Branch, which should be the largest and most flourishing in Ireland. By so doing, they would at once double the representation of the Branch on the General Council of the Association, and so double its influence in its struggle for the rights and privileges of the profession in Ireland. Surely, the trifling annual subscription need deter no member from affiliation to the Branch. At the same time an addition of upwards of fifty pounds a year to the funds would enable the work in which we are engaged to be done with more completeness and effect.

Shall I appeal in vain to the *esprit de corps* of those members of the British Medical Association who are at present unattached? The interests of our noble profession are at stake; the status of our brethren of the Army Medical Staff is not yet assured; the grievances of the overworked, underpaid dispensary medical officers of our country cry aloud for redress, immediate and complete—but enough. I would like to close with a quotation from one of the many addresses to students delivered by the late Sir Andrew Clark. Opinions may differ as to the actual niche which his name should occupy in the temple of fame, but that he was ardently devoted to his profession no one can deny. Medicine, according to him, was "the metropolis of the kingdom of knowledge." We may all pay heed when he says to us: "You have chosen one of the noblest, the most important, and the most interesting of professions, but also the most arduous and the most self-denying, involving the largest sacrifices and the fewest rewards. He who is not prepared to find in its cultivation and exercise his chief recompense has mistaken his calling and should retrace his steps."

EXTRACTS FROM AN INAUGURAL ADDRESS ON THE OPPORTUNITIES FOR RESEARCH IN TRINIDAD.¹

By BEAVEN RAKE, M.D.LOND.,

Medical Superintendent of the Leper Asylum, President of the Branch.

MALARIAL DISEASE.

In Trinidad we live in a rich and comparatively unexplored storehouse of pathology. Many questions arise with reference to the malarial affections of this island. It is now well known that malarial fever is associated with a polymorphic protozoon called the plasmodium malarie, discovered by Laveran in Algiers, and afterwards found by Marchiafava and Celli in Rome and by Councilman in Baltimore. The organisms occur in various forms within the red corpuscles, or as free crescentic bodies. The intracorpuscular pigmented bodies are specially characteristic of the acute forms of malaria, and are readily affected by quinine. The crescents occur in the more chronic varieties, and often persist even while the general health is improving. Osler missed the plasmodium in only 8 out of 70 cases examined by him, and 5 out of these had taken quinine, so that we may fairly conclude that it is always present in malaria. It is, therefore, evident that the search for the plasmodium plays a most

¹ Delivered before the Trinidad and Tobago Branch of the British Medical Association.

important part in the diagnosis of all doubtful cases. Detailed records of observations in the many and various cases of headache, neuralgia, and other chronic affections, so often ascribed to malaria in this colony, would be of the greatest value. Again, we all of us know the controversy which arises from time to time as to the difference between hæmorrhagic malarial fever and true yellow fever. Here, again, a series of observations on the plasmodium would be most interesting. If a careful series of examinations in cases of yellow fever failed to show the organism, we should be driven to admit a specific difference between this disease and the worst forms of malarial fever.

TYPHOID FEVER AND DYSENTERY.

Another fever which has been much in evidence during the past year is typhoid. This disease is certainly less common the West Indies than in more temperate climates, and also presents greater difficulties of diagnosis, especially in the dark-skinned races in whom the eruption is not easy of detection. Another difficulty arises from the frequency here of the malarial fevers. In this connection, again, the discovery of the plasmodium ought to be of great assistance in diagnosis.

The distribution of typhoid in Trinidad has been remarkable. The investigations of the committee appointed by the Board of Health showed that nearly all the cases occurred in Port of Spain; and that, though certain parts of the town were more affected than others, the epidemic did not travel in the direction of the water supply, nor was it more prevalent in the water sewage district. Here we are faced by a new difficulty. We cannot now accept Murchison's theory that typhoid fever is pythogenic, or simply produced by filth without the agency of a specific organism. Failing water as a carrier of the germ, we must appeal to dust, as in the case of tuberculosis. The summer months, however, during which the epidemic was most marked, were very free from dry dusty days. It is evident that, in connection with typhoid epidemics in this colony, weather reports are most important, such reports to include not only temperature, rainfall, and the other data usually given, but also an account of the amount of wind and dust prevalent.

Another disease which presents many problems is dysentery. Sporadic cases are always present here, as in other tropical colonies, but how are we to explain the epidemics which occasionally occur? It almost seems as if there might be some ground for admitting the epidemic constitution of Sydenham. What is especially wanted in dysentery is a series of careful bacteriological observations in sporadic cases of the disease, and a similar series made during an epidemic. In the last great epidemic which proved so fatal in 1888, and which attacked all sorts and conditions of men and women, irrespective of their surroundings or habits of life, the disease had a most erratic distribution. I found some of the earliest, and most severe cases on the peaks of the northern mountains, many hundred feet above the sea level, and in localities apparently free from the risk of water contamination. Again, some of the low-lying districts would escape entirely, while others close by would be almost decimated by the disease. No definite distribution of cases along the lines of water supply was traced. If the epidemic depended on the dissemination of a specific germ, this was probably airborne, mixed with dust.

KIDNEY DISEASE.

In spite of the statement in Hirsch's *Handbook*, as to the rarity of Bright's disease in certain West Indian colonies, there can be no doubt that it is very common in Trinidad. Hirsch points out that by only a few of the authors referred to by him is a connection traced between renal disease and malaria. He further states that the intense centres of malaria, such as Lower Bengal, China, and Guiana, are the regions least affected with kidney disease. To the last of these statements, however, exception must be taken, for recent reports from British Guiana show that kidney disease is very common in that colony.

In Trinidad I have shown that Bright's disease is much commoner in lepers than in persons free from leprosy. The records of deaths in the Colonial Hospital showed a percentage of $7\frac{1}{2}$ cases of kidney disease, while similar records at the Leper Asylum give 32 per cent. It is probable that this greater frequency is explained by the damage which is done

to the sweat glands and ducts in leprosy. We have yet to learn whether the interference with the functions of the skin which takes place in malarial fever is sufficient to produce kidney disease, or whether this may also be caused by the arrest in the kidneys, in common with other organs, of pigment which has escaped from the disintegrated blood corpuscles in the spleen.

AINHUM.

Ainhum is another ill-understood disease which we meet with in Trinidad from time to time. Eyles, of the Gold Coast, has studied the changes which take place at the site of amputation, but we are badly in want of careful dissections of the nerves which supply the affected toe. Ainhum not being a fatal disease, it is very difficult to get opportunities of making such dissections, for patients are soon lost sight of after the toes have been amputated or have dropped off. From the analogy of cases in the Leper Asylum, where a condition resembling ainhum is not uncommon, not only in little toes, but also in other toes and in fingers, it seems to me very probable that ainhum is a trophic disease dependent on neuritis, and that when the groove has once formed its further extension and deepening are due to the constant movement and injury to which the toe is necessarily exposed. In an anæsthetic leper at the asylum, most of whose fingers were gone or ankylosed, I found a groove-like ainhum in one of the remaining fingers. This finger, the patient told me, he was in the habit of pressing against his thumb in order to hold his cup or knife. It is probable that such intermittent pressure would act as an irritant, and give rise to epidermal hyperplasia, and consequent deepening of the groove.

YAWS AND SYPHILIS.

The subject of yaws has lately been brought to the front again by Numa Rat, of the Leeward Islands, who has written a careful monograph on the subject. Hutchinson, who at the request of the author wrote some prefatory remarks, confessed his inability to accept from the data furnished the view usually held in the tropics as to the non-identity of the disease with syphilis. Towards the elucidation of this long vexed question Trinidad can contribute valuable material. Necropsies should be made on all bodies which have been the subject of yaws at any time during life, and gummata should be carefully searched for. Exact observations as to the primary lesion in yaws will also be of great value, also as to the tonsils and pharynx in the secondary stage, and, further, as to the protection afforded by syphilis against yaws and *vice versa*. It may be as well, perhaps, to state here that after a more or less close acquaintance with yaws extending over a period of ten years, I have failed to see anything to suggest its identity with syphilis beyond the fact that both diseases yield to the same drugs. This argument is evidently fallacious, for it is well known that the same drug may occasionally cure two entirely different diseases, as in the case of arsenic, which cures pemphigus and some forms of malaria.

ASCARIS LUMBRICOIDES.

Ascaris lumbricoides is very common here as in other West Indian colonies. To what extent these round worms are responsible for the convulsions which so often prove fatal is still a matter for controversy. In spite of the statements of Hensch and others, it seems to me that the experience derived from necropsies in cases of sudden death in Trinidad strongly supports the belief that round worms very often cause convulsions. On looking through my notes of medico-legal necropsies, I find the following record as regards round worms:

In 9 cases the *post-mortem* examination showed only such lesions as could be attributed to the presence of worms in the intestine. In 2 more cases round worms were found associated with other conditions, once with malarial fever and once with pregnancy and dilated heart. In one case death was due to asphyxia caused by the impaction of a round worm above the epiglottis. In one of the 9 cases first mentioned a volvulus was discovered in the ascending colon; in another, cerebral effusion was found—a result mentioned by Eichberg. In the other 7 cases there was nothing beyond the presence of the round worms to account for death. One of these cases was most remarkable. The patient, aged 13, a boy in the reformatory, was suddenly seized with con-

vulsions. Santonin and calomel were given; but the fits recurred, and he died in thirty-three hours, after having upwards of thirty fits. At the necropsy all the viscera were carefully examined, but nothing was found to explain the convulsions except two round worms in the small intestine.

Further exact records of the condition of the viscera in fatal cases of convulsions associated with worms are much needed. It is possible that violent and prolonged convulsions may in some cases produce such conditions as cerebral effusion or volvulus. Be this as it may, we cannot ignore the great importance of a thorough knowledge of the pathology of ascarides in the tropics.

ANKYLOSTOMA DUODENALE.

Though the valuable researches of Lutz have cleared up many points in the life history of this worm, we have still much to learn as to the pathology of the symptoms which it induces. For example, is the intense anæmia, which is the chief characteristic of ankylostomiasis, the result of a simple drain of blood from the intestine by the worms, or is it, as William Hunter contends, the result of excessive blood destruction in the portal circulation effected by the action of certain poisonous agents absorbed from the intestinal tract through breaches of surface made by the worms? Analysis in four cases of ankylostomiasis, which Mr. Casmody and Mr. Tate have been kind enough to make for me, have shown far less iron in the liver than is usually found in cases of pernicious anæmia. So far, then, the theory of a simple drain of blood is supported, but I am waiting for more cases before summarising my conclusions. Another very important question is the relation of dirt eating to the presence of the parasite. Lutz regards geophagy as a symptom of ankylostomiasis, but it must also be admitted that fresh parasites may be introduced into the intestine with the earth. Again, severe and fatal cases of earth-eating are sometimes met with in which no ankylostomata are present. On this point many more observations are needed.

AN ADDRESS

ON THE

TREATMENT OF CANCER OF THE BREAST.

Delivered before the Harveian Society of London.

By W. WATSON CHEYNE, M.B., F.R.C.S.,

Professor of Surgery in King's College; and Surgeon to King's College Hospital.

I THINK that this subject cannot be too often brought before the notice of the medical public. First, because the disease is common, at any rate in certain regions, and seems to be becoming more so. Secondly, because the necessary operation is looked on as a very simple one, and is now done by many practitioners, even by those who do not undertake the more serious operations of surgery. Following the description found in most textbooks of surgery, all that is thought necessary is to enclose the nipple and areola in an elliptical incision extending from the inner to the outer side of the prominent part of the breast, dissect the skin off the rest of the breast till one thinks that one has got beyond it, then deepen the incision to the muscle all around, and, seizing the breast, pull it off the muscle quite regardless as to whether the pectoral fascia comes with it or not. Further, it is often taught that if no glands are felt in the axilla it need not be opened, or if glands are felt the finger should be introduced and the enlarged glands pulled out. I do not of course mean to imply that this is the common practice with surgeons at the present time, but it was so till quite recently, and has been and is so taught in some textbooks. This method is wrong in every particular, and this leads me to the third reason why it seemed desirable to bring the subject forward, namely, that researches have been made within quite recent years, notably by Heidenhain, Stiles, Raymond Johnson, and others, which have given us much more precise knowledge as to the amount of tissue which ought to be removed in these operations, and it is well that these researches

should be kept before the medical public and not be lost sight of.

OBJECT OF OPERATION.

What is the object of operation in cases of cancer of the breast? Some still look on cancer as a constitutional disease, and therefore only operate with the view of taking away the local manifestation and prolonging life, and they reckon that by operation twelve to eighteen months are added to the patient's life. They expect recurrence as a matter of course, and therefore do not pay very great attention to the exact details of the operation. Others look on the disease as essentially local, and therefore operate in the hope of ridding the patient of it entirely—in fact, of producing a cure. There are, I think, very few at the present day who do not adopt the view that the disease is essentially local in the first instance, and that distant parts become attacked as the result of direct infection from the primary growth. We know from pathology that malignant epithelial growths only begin in epithelial structures, and cannot commence in lymphatic glands, cellular tissue, etc.; and, therefore, recurrences taking place in these tissues after operations on the breast cannot mean a fresh manifestation of a constitutional disease, but must imply the growth of portions which have been left behind at the time of the operation. And, further, we know clinically that these local recurrences usually occur within a short period after the operation—six to eighteen months as a rule—and that if a patient remains free for a longer period, there is a very considerable probability that she will remain free permanently. As a matter of fact the relation of the constitution to cancer is, I believe, practically the same as its relation to tuberculosis—namely, that there are certain persons in whom the disease will spread more rapidly and readily than in others, but that in all there must be some point of commencement, where the disease is in the first instance purely local. The chief argument in favour of the constitutional nature of the affection is the occurrence of cases where the second breast becomes the seat of disease after the commencement of the disease in, or the removal of, the first. Recent researches have, however, shown that in some persons, especially those with extensive mammae, the lymphatic systems of the two breasts intercommunicate, and hence a direct spread of the infective material from one to the other is quite possible; and, as adding support to this view, is the fact that in these cases the primary growth is generally situated towards the sternal side of the breast first affected.

Further evidence of the local origin of cancer is furnished by the results of operation. Even with the older methods of operating a certain number of cases taken in hand at an early period of the disease remained free from recurrence, and more recently the number has increased in correspondence with the greater completeness of the operation, so that a very general estimate of 10 to 15 per cent. of permanent recoveries is given. Since the publication of Heidenhain's researches, however, surgeons who have acted on his facts produce better results, and in the recent French treatise on Surgery statistics are given where in one case as many as 22.5 per cent. were free from recurrence after three years. It must be noted, however, that this does not show the full recent improvement, because some of these were operated on several years ago, and I believe better results ought really to be obtained. Success must essentially depend on operation at the earliest possible period and on the thoroughness with which this operation is carried out.

EARLY OPERATION.

Early recognition of the disease and early operation cannot be too strongly insisted upon. Unfortunately, cases are too often watched and treated with various useless remedies till the infection has spread to such an extent that the possibility of getting beyond it by operation has become very doubtful. This is generally, no doubt, the fault of the patient, or her misfortune, in that she has not happened to notice the growth, and it cannot be a matter of surprise that, especially with the ordinary limited operation, recurrence should so frequently take place. Where one is certain that the disease is cancer and that the case is suitable for operation, delay is naturally objectless and unjustifiable, and of course it is only cases in which the diagnosis is doubtful which are watched.