ADDRESS
DELIVERED ON THE OCCASION OF
THE PRESENTATION OF PRIZES
AT THE
ARMY MEDICAL SCHOOL AT NETLEY

February 1st, 1886

BY
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PRINTED BY REQUEST

LONDON
SPOTTISWOODE & CO. PRINTERS, NEW-STREET SQUARE
1886
ADDRESS.

Before proceeding to make the remarks which may be expected from one who occupies my present position, I would desire most heartily to congratulate on their success the gentlemen to whom I have just handed the rewards of their exertions; supplemented as they were by what must have been most acceptable to the recipients—the cheering approval of their fellows. To those who have not been successful in their present competitive efforts, without for one moment depreciating the position of those who have succeeded, I would say, Be not discouraged, for there still remain other goals to be reached, other fields to be won, in which it is open to each of you in the course of your professional life to secure prizes not less honourable, not less distinguished, than those which have been gained here to-day. We cannot all expect to win the same prize—

Non cuivis homini contingit adire Corinthum.

It seems to me that an occasion like the present bears many points of resemblance to those on which the memory of founders and benefactors is by custom remembered and honoured. In such circumstances, and in this connection, it is right that the name of Sidney Herbert should occupy a foremost place. To him was accorded the title of "the soldier's friend," and his death was felt to be indeed a national loss. He has left on every side evidence of his whole-souled devotion to the welfare of the British soldier, and nowhere more con-
spicuously than at Netley. Nor should I fail to say that in this work he was supported and encouraged by one who was ever foremost to assist in all well-considered plans for the national good, the late Prince Consort. Sidney Herbert died all too soon, literally at the post of duty; but he lived long enough to inaugurate improvements in the Medical Department of the Army, of which, in the present day, the nation is reaping the rich results.

Publicæ saluti vixit non diu sed toties.

It is with an effort that I trust myself to speak of one of your greatest benefactors, Edmund Parkes, the intimate and valued friend of many years. Of him your late Professor, Surgeon-General Maclean, and many others, have spoken so eloquently and so truthfully that I dare not weaken what they have said by any words of mine. It is impossible to over-estimate what our profession lost in losing Edmund Parkes.

His life was gentle, and the elements
So mingled in him, that Nature may stand up
And say to all the world: 'This is a man.'

Yet I cannot refrain from mentioning by what a trifling but fortunate incident his brilliant powers were secured for the service which he so nobly adorned. It was in 1842 that the Secretary for War placed at the disposal of the University of London a Medical Commission in the Army. Senior as I happened to be by a year or two to my friend, the commission was first offered to me. I was unable to accept it, but Dr. Parkes did so, and with what happy results for the Army and his country is well known.

The name of Ranald Martin, another friend, is here associated with the prize for military medicine; without under-valuing the good work that Martin did as a physician in the treatment of disease, let me say that his fame will chiefly live as that of a pioneer in sanitary science. In his early days it
was held to be the duty of a doctor to cure disease, but the question of its prevention was never entertained. It was also said that "a doctor's advice may be a good thing, but only when it is asked for." To have contributed to the overthrow of such crude notions, and to have brought about a proper comprehension of the position and duties of the Army medical officer, is of itself sufficient to have established Sir Ranald Martin's claim upon the gratitude of his country. Distinguished as were his services in India, the medical profession in England will never forget how zealously and how successfully he laboured to promote the improvement of the public health, and to further the advancement of the healing art.

I had not the privilege of being personally acquainted with the benefactor who founded two of the prizes which have passed through my hands to-day, the late Mr. Montefiore, himself a member of our profession, but I am aware that on a like occasion to the present Sir James Paget paid an eloquent tribute to his worth and distinguished liberality. His example is one that we should all be well pleased to hear had been followed by others.

Of the donor of the last prize presented—Sir Joseph Fayrer—I have happily no occasion to speak, as in the past, and I trust that he, the Director-General, Sir Thomas Crawford, and the Professor of Pathology, Dr. Aitken, who alternately offer this prize for Pathology, may long live to witness the fruits of their well-directed endeavours to advance scientific medicine and surgery.

Proceeding now to offer you a few general observations on the subject which has brought us together, let me in the first place, say that I accepted, not without hesitation, yet with pleasure, the invitation to address you to-day, for I was desirous of expressing the sympathy and kindly feeling which exist in the minds of Civil practitioners towards their brethren in the Army, Navy, and the Indian Medical Services.
Trained, as we all are at first, in the same grooves of professional education, there comes a point at which we diverge, each to pursue, with varying success and in different spheres, the practice of our common art. Yet let me declare my conviction that this divergence cannot be permanent. No doubt we shall often meet on common ground; more especially when the medical officers of these services, returning from time to time to their old schools, whether at Netley or elsewhere, will recognise friends always glad to welcome them, and always ready to point out all that may be new and instructive. But the temporary divergence of our paths is not without benefit to the Civil profession. We are much indebted to our brethren in the Public Services for a knowledge of diseases differing from those with which we are, in practice, familiar in this country. Many complex problems of etiology and pathology, which I must not stay to enumerate, have received important contributions to their solution from the careful work of the Army surgeon. Need I do more than mention cholera? Much of what we know of that disease comes from the labours of those whose footsteps you are following. Who has instructed us so well on the hydra-headed forms of malaria, or on those dreadful scourges, dysentery, scurvy, yellow fever, liver abscess, and parasitic diseases, as the Army and Navy doctors? Such a debt on our part, gentlemen, to your class binds us all in closer accord.

The Army Medical Services have contributed much to the honour and glory of our profession; and proud as we are of your successes, jealous as we are of any slur cast upon your fame, we fail to recognise any distinction in our united striving for the common good. Are not the labours of Annesley, Pringle, Martin, Guthrie, Longmore, Morehead, the Goodeves, of Parkes, of Maclean, of Fayrer, Muir, Chevers, Murchison, De Chaumont, Bryden, Macnamara (all men whose invaluable services to medical science we cheerfully recognise)
a credit to us all, and do we not claim them to be of us as you of yourselves?

Even now a practical expression of the closeness of our alliance is taking shape in the formation of a Volunteer Medical Staff and of Bearer Companies, to be recruited for field service from among medical students and practitioners.

I was further glad to avail myself of the opportunity of being here to-day and of taking part in these proceedings, to make myself personally familiar with the work which is done at Netley, which I have, hitherto, known only by report.

I am aware of its having been asserted that the existence of such an institution as this is superfluous, and that the ordinary curriculum which suffices to qualify for Civil practice should be, and is, sufficient for the Army surgeon. This view I believe, gentlemen, to be profoundly erroneous.

It is a subject of grave consideration among those who are concerned in the education of medical men, how best to supplement their routine instruction by the various forms of special training which are necessary to qualify them even for the needs of every-day practice. The all too short period of four years, inadequate to treat our science satisfactorily in its ever widening scope fails to furnish the young doctor with that knowledge of how to deal with patients in the circumstances of their home life, which is so essential to his success and to their welfare. It is not for me to say here how this difficulty might best be met; but I am sure there is no young practitioner, fresh from the class-rooms and the wards of an hospital, who has not felt the peculiar difficulties to which I allude. It is interesting for me to observe that what is a pressing want in Civil life is here adequately provided on behalf of you who may be even said still more to require such special training.

If, as I am firmly convinced, I am right in this contention, let us see to what extent Netley fulfils these requirements.
Let us take, for example, the syllabus of your late esteemed professor, Dr. Maclean, to illustrate how completely are described such essentially tropical diseases as malaria, yellow fever, dysentery and the like, the treatment of which will form so large a proportion of your future work. Nor need we fear but that in the hands of Dr. Maclean's able successor, Professor D. Boyes Smith, the efficiency of the teaching will be fully maintained. How, without such preparation, should you feel justified in venturing on the practice of your profession, with no further insight into these diseases than can be afforded by the ordinary teaching of a medical school? Where, too, could you expect to learn with such completeness the subject of military surgery, put before you as it is by one with the world-wide reputation and large experience of Professor Longmore?

There are other subjects, if possible of even more importance, which may be said to belong specially to Netley. Here, under the guidance of that distinguished pathologist, Professor Aitken, in your magnificent museum and post-mortem rooms, you practically investigate all those diseases which, originating in the conditions of foreign climates, will be met with by you in their earliest stages in the daily course of your coming duties. I shall immediately refer to the importance to the soldier of hygiene and sanitary science in their practical application; and nowhere are these subjects so thoroughly and systematically taught as here, by Professor de Chaumont, on whose shoulders the mantle of our lamented Parkes has so worthily fallen.

Here, too, the young medical officer is taught the technical duties of his office, and here he is introduced to Army discipline, so that he may not be called upon to command until he shall have first learned how to obey.

In pursuance of my subject I have felt it my duty to inquire further into the character and amount of work which
Netley has done. I have ascertained that since its establishment in 1860, 2,337 medical officers have passed through the school. It is impossible to enumerate even the names of those who have fairly earned distinction, and I must confine myself to the mere mention of a few—Surgeon-Majors McLeod, Harvey, King, Cunningham, Lyon, and others who are filling distinguished positions as professors in the several colleges of the Indian presidencies, inculcating there the system and communicating the knowledge which they have here acquired. To these I would add with pleasure the names of Surgeon-Major Lewis and others, assistant professors here, who have markedly contributed to our acquaintance with Indian diseases, especially Dr. Lewis, by his remarkable researches on the *Filaria sanguinis hominis*.

Hence Netley, with its special training, appears to me to be pre-eminently calculated to furnish a knowledge of those duties which devolve on the medical staff of an Army in preserving the health and the life of the soldier. How better can this be illustrated than by a brief contrast between those campaigns in which the services of a well organised medical staff were unavailable and others in which those services have been rendered and have proved invaluable.

In 1809 there set out from our shores the Walcheren expedition, which, after some trifling military successes, resulted in placing in the island a garrison of 18,000 men in the September of that year. Within the three following months more than half of them died, or were invalided to England, and the place was finally evacuated at the end of December. So terrible a calamity called forth, as might have been expected, loud censure. Popular indignation compelled a Parliamentary investigation, at which it was elicited from Sir James McGrigor, the chief medical officer of the expedition, that the stores were deficient, and that the supply of Peruvian bark, so essential for the treatment of malarial
fevers, was wholly inadequate, and was almost entirely dependent on chance adventurers, who followed the Army to sell their wares at a premium. Nor were the medical staff themselves in a better position in respect to their notions of the nature of the diseases with which they had to contend; whilst nothing in the shape of preventive measures seems to have ever been contemplated. When the Government determined on a special mission to Holland to 'inquire into the nature and causes of the great sickness and mortality prevailing in the British Army,' each member of the Civil Medical Board excused himself from going, and the chief, Sir Lucius Pepys, at the bar of the House of Commons, pleaded his advanced age, and that he knew nothing of the investigation of 'camp and contagious diseases.' At length Sir Gilbert Blane was sent out; but he, after rightly concluding that the diseases were mainly intermittent and remittent fevers, typhus and dysentery, proceeded to argue, with a complacency which to us now appears shocking, that since the native inhabitants regarded the season, as far as they were concerned, as rather less sickly than usual, and further, that since a like degree of illness had prevailed among the French and Dutch troops on previous occasions, the causes of the frightful ravages were clearly out of the reach of human control. Thus, from ignorance and incompetence, a British Army was sacrificed to disease, and an expedition rendered entirely ineffective.

Passing from this sad history to the Crimean campaign, 1854–6, the results of which were not very dissimilar to those just mentioned, it is instructive to note under what circumstances that campaign was entered upon. Dr. Andrew Smith, the Director-General, commenced his preface to the 'Medical and Surgical History of the British Army during the War against Russia in the years 1854–6,' in these words: 'When it was determined in 1854 that a military force should leave this country and proceed up the Mediterranean to aid the Turks,
should it be necessary, in resisting the advance of a Russian Army then threatening Bulgaria, I was required to immediately provide an adequate medical staff, and the amount of stores likely to be wanted for hospital purposes. If I had been given to understand when I received this intimation that the troops were to be employed on the duties which are usually exacted of soldiers in times of peace, I should have had no difficulty in deciding what I ought to furnish, but the having been, on the contrary, led to expect that they would probably soon be engaged in the field in conflict with an enemy, caused me both much consideration and anxiety, the more especially as neither myself nor any of the officers of the department had, from personal experience, a knowledge of all that would probably be found necessary for the wants of sick and wounded during a European war.'

The total mortality of the British troops engaged in this campaign amounted to the enormous number of 18,058, exclusive of those killed in action. Of this number 16,297 deaths were the result of disease alone, and only 1,761 of wounds and mechanical injuries; whilst it is recorded that in the month of January, 1855, nearly 10 per cent. of the troops succumbed to disease. What share of these terrible results should be ascribed to the want of knowledge and lack of preparation of the Army Medical Department in the earlier stages of its campaign, as admitted by their chief, and what to the proved failure of other branches of the service, is not for me to apportion. Suffice it to say that, notwithstanding the satisfaction expressed by Dr. Smith, and his published opinion that 'nothing much more favourable than was experienced must be expected,' a Royal Commission was appointed, under the presidency of Lord Herbert, one of the most important results of which was the establishment of this special medical school.

From the time of the Crimean war, nay, even during the
last year of the campaign, commenced that system which, intelligently and skilfully developed, has resulted in what may be termed almost perfection at the present day. The very obvious principle, that it is more economical to preserve, in every way, the health and strength of the soldier as a mere fighting machine, was at last grasped by the authorities. The first step to this end was to ascertain what was really required; and much credit is due to Dr. Andrew Smith for establishing an organised system of reports as a basis for formulating future requirements. It may be noted in passing, that when preparing for the Crimean campaign, he could only find, as the medical records of the whole Peninsular War, "two or three valueless documents, which merely indicated the number of staff medical officers serving in Spain during a few months of 1812." Thus were learned, from the defects of the past, lessons for later guidance.

How valuable was the information thus gathered (and how delusive was Dr. Smith's prophecy) has been shown in the recent Egyptian campaigns. This a very few figures will clearly indicate. The average strength of the troops serving in Egypt from July 17 to October 9, 1882, was 13,013, the admissions into hospital were 7,590, giving a ratio of 583·3 per 1,000, but the number of deaths, including 93 killed in action, amounted to only 172, giving a ratio of 7·15 per 1,000 deaths from wounds and disease.

Even still more striking are the results of the Suakim expeditionary force for a similar period, viz., from March 1 to May 14, 1885, when, with an approximate strength of 9,944, there were only 17 deaths out of 2,047 cases of sickness admitted to hospital, giving a ratio of 1·71 deaths per 1,000; whilst absolute perfection was reached in the first Suakim expedition, from February 15 to April 6, 1884, when, with an average strength of 4,018, of which there were 314 cases of sickness admitted to hospital, the mortality was nil.
To illustrate still more forcibly the improvement which has taken place, I may point out to you that, in the Egyptian expedition of 1804, Sir James McGrigor reported that, plague excepted, the most formidable disease in the Army was ophthalmia; of the Indian contingent alone 50 were invalided blind, and the French are said to have sent home 1,000 men absolutely deprived of sight; whilst in the first of our recent campaigns in that country not a single man lost his eyesight, though nearly 1,500 cases of inflammatory affections of the eyes were admitted to hospital.

To have reduced the death-rate from sickness of an Army in the field to nil is a triumph which cannot be too strongly dwelt upon when urging an extension of the means by which such results have been attained, reflecting as they do in the highest degree on the skill and care with which the Director-General, Sir Thomas Crawford, arranged for the medical conduct of these expeditions.

Equally remarkable are the benefits to the Indian Army as regards the diminution of mortality. But this subject has been so fully and ably treated by Professor Maclean in his farewell address delivered here last year, that I need not dwell upon it now. Nor need I more than mention to those whom I now address the not less satisfactory results, both in respect to the amount of sickness and of death-rate, of the Army services at home.

What, then, are the inferences to be drawn from the consideration of such facts? In earlier times armies were decimated and rendered useless by maladies which might have been prevented if wiser and more practical counsels had guided the inception and progress of the several expeditions. How different would have been the results of these expeditions if the knowledge and skill which are now at our disposal had been available. How many precious lives, what an enormous amount of suffering, what an expenditure of money, would have been saved if such had been the case.
Learning from these recent Egyptian campaigns what can be accomplished, notwithstanding an unfavourable climate and season, and great fatigue, by principles based on scientific knowledge and applied with practical skill, we turn to the important question how such results can be maintained.

In the first place, we must give credit to the constitution of the Medical Department of the Army, to which has now been assigned complete control of its own work, subject only to the General in chief command. This independence, gentlemen, involves grave responsibility, which every medical officer entering the Army must assume, with the full knowledge that a failure of duty on his part will cast blame upon the whole. To insure the permanence of our recent success, every effort should be made to induce a high class of medical men to enter the service, and this result can only be accomplished by maintaining a high rank for the medical officer, by ensuring a due recognition of the value of his services, and, lastly, by taking care that his special education, such as that afforded here, is made even still more thorough and extended, especially, it may be, by a more prolonged course of instruction. The adoption of these recommendations may entail additional expense, but such expense sinks into insignificance beside the enormous losses in men and money which it would assuredly prevent. Nor should it be lost sight of that in a small army like ours, dependent for its maintenance on voluntary enlistment, it is of the greatest importance to satisfy the recruit that he will be well cared for, and that no pains will be spared to diminish his risk of death and suffering from disease.

I fear, gentlemen, that I have already exhausted your patience, but I would still desire to dwell for a moment on one or two points which more intimately concern those who are leaving here to-day. Placed as you often will be in positions of doubt and difficulty, you will do well to act for your patients as you would wish to be dealt with yourselves; for this course,
even if not the best which can be pursued, will assuredly be the best in your own judgment, and will at least be sanctioned by an approving conscience. I have myself found this a golden rule of life.

I wish that time permitted more than the briefest mention of a question which is of the deepest interest to you all. Complaints, I know, are made of the difficulty of filling the spare time which, after your routine work is done, is said to lie heavily on your hands. I cannot help feeling that to advance such complaints is not creditable to members of a learned profession. No single subject of inquiry should fail to interest him who has to deal with man as we do, even apart from the countless problems concerning the origin and nature of disease as influenced by climate and locality, which press upon us for solution. Trained as you have been in scientific methods, you approach the investigation of nature from a better standpoint than has been possessed by many who have nevertheless achieved distinction by patient labour in some one of the innumerable fields of research. If you desire to know what can be done, look to the valuable contributions to physiology which were made by Parkes in his spare hours; or to therapeutics, as evidenced by the systematic inquiries into the action of ipecacuanha in the treatment of dysentery pursued by Surgeon-Major Docker; or turn to the pages of the grand work on the poisonous snakes of India which has been produced by my friend Sir Joseph Fayrer, in addition to his many most important practical contributions to our art; or follow such investigations in natural history as those of Surgeon-Major Dobson and others.

If you follow one or other of these examples, which are but a few of many, you will find you have no reason to say that you are without occupation for your spare hours. Nay more, may not many of these hours be devoted to keeping yourself abreast of the progress of medical science at home?
I cannot conclude without allusion to a subject which I know occupies the thoughts of many officers of the Medical Department of the Army. I refer to the feeling that their claim to honorary distinction and rewards is not inferior to that which is recognised in other departments of the service. In recognising this claim on your behalf, I would venture to say is it not only equal to that of those who serve in other departments, but even superior.

I recognise with pride the bravery of the English soldier in combat: I recognise his discipline, his endurance, and his fortitude under all circumstances: I recognise, too, the skill and the genius by which he has been led, not only in recent campaigns but in many others. Still, I must insist, also, on the bravery of the medical officer, who is equally to be found in positions of greatest danger, calmly seeking how he can help in relieving suffering, and in removing beyond that danger those of his comrades who have been wounded in the fight. All this he does without any of the excitement of the combatant officer, and when the battle is over the heavier portion of his work ensues. He has to labour unceasingly to help and relieve the wounded. How he performs that duty has been forcibly described in a recent most interesting work, From Korti to Khartoum, in which Sir Charles Wilson says 'the doctors behaved splendidly, nothing could have been better: they had been up three nights and through two fights, and here they were again working on the fourth night. One of them, I believe, fainted from exhaustion, but they went on until every wounded man had been attended.'

Yes, such is the conduct of the officers in the battle-field and after. But the dangers and the labours of the medical officers of the Army are not confined to the battle-field and to the tents of those who are stricken down; these men labour manfully and are ever ready to risk their lives wherever pestilence and disease are found.
The combatant officer of the Army is always ready to perform his duty as a work of necessity and in obedience to command, but his duty is unfortunately associated with the destruction of human life, whilst that of his colleague in the medical department is to save life and to mitigate suffering, whether it be that of friend or foe, alike in all and every circumstance.

We may trace back the actions of combatant officers to the earliest ages in the history of mankind, when men fought for their tents, their flocks, their herds, and their lands, as indeed it may be said they do in the present day; whilst, on the other hand, we trace back the origin of those who practise the ‘healing art’ to a period when they were received with god-like honours, or as when Homer said in words rendered by Pope—

A wise physician skilled our wounds to heal
Is more than armies to the public weal.

For these services, and for those to which I have already alluded, in the prevention of disease, I would gladly see founded, beyond the distinctions shared, though very partially, with other departments of the Army, some award of special recognition. Our gracious Queen, amongst the many great events which will ever render her reign conspicuous in English history, has founded a recognition of bravery in the Victoria Cross. Her Majesty has established the Order of the Star of India in recognition of services rendered in connection with that country. Her Majesty has also founded a medal—the Albert Medal—a reward for the preservation of life. Would it not be a gracious act of the Queen to institute a decoration which might be called ‘The Order for Medical Merit’? Such an order would be a fitting recognition of noble services rendered from a conscientious sense of duty, such as those described by Sir Charles Wilson.

Gentlemen, you may not succeed in obtaining all that you desire and deserve in regard to honorary distinctions, but
you can enjoy the far higher honour of being conscious that you have done your duty, and that that duty is the relief of human suffering.

Yes, gentlemen, whether your services are fully recognised or not, you have great and noble work to do; it is for you to preserve the health and the lives of our soldiers and our sailors; it is for you to relieve disease and suffering; it is for you to follow the example of the great Founder of our Christian religion, He who went about comforting the afflicted and healing the sick. To each of you, gentlemen, I would say, Go on your course, ever following this great example, for

These are majestic arts and worthy thee.