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ADDRESS IN SURGERY

BY

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THE MEDICAL SERVICES OF THE ARMY AND NAVY.

In presence of an assemblage of so many representatives of the medical science of the British Empire, I have much pleasure in gratefully acknowledging the honour of being called upon to deliver the Address in Surgery. It is a task I enter upon with a sense of responsibility, and a fear lest I should fail to do justice to the duty entrusted to me by the Council of the British Medical Association. But I take courage from the belief that you will be disposed to form a lenient judgment of any endeavour to contribute to the usefulness of the annual meeting of our Association, and because I think that the theme I have chosen for the Address in Surgery on this occasion is one in harmony with the high aims of our science, since it has for its design to promote the great objects for which our profession exists, those, namely, of saving the lives and diminishing the sufferings of our fellow-men.

A NEW DAY IN SURGERY.

At a time like this one cannot help being strongly impressed by the feeling that the surgical profession in our day has had much given to it, and that from it much will be required. We live in an era that can claim to be one of most exceptional, probably unique, interest. We have witnessed in it the most marvellous and rapid advances the world has ever experienced in the powers of mastering and warding off disease. We have passed through many gloomy years, in which we worked our life's work blindly and in the dark, with dread fastening on the heart as surely as the hand grasped the knife, for ever trembling before the horrors of surgical pestilence; and now we have been privileged to see the dawn of a new day when septic disease is being robbed of its terrors by the discoveries of Lister, those great gifts to humanity, which coming generations will hereafter delight to recall, recognising that whatever we owe to the great surgeons of the past has been but little in comparison with the benefits he has conferred on us, and through us on all mankind. And we may be sure that future ages will be very critical in their judgment of us, the present race of surgeons, and demand to know what use we made of our unparalleled opportunities, and whether we went astray amidst all the light that was given us.

THE EFFECT OF LISTER'S DISCOVERIES.

The importance of the period in which we live it would be difficult to exaggerate. For the first time in all the centuries that have flown our profession has changed from a craft into a science, a result that, though many have contributed to it, we owe mainly to Lister. Every progress made in the years of

my own professional life seems to dwarf before his great discoveries, and imagination fails to grasp the limits and possibilities of the gigantic revolution which he commenced, or the unspeakable benefits it has conferred, and may yet confer, upon upon the world. The achievements of the surgeons before his day have now for the first time become fruitful and certain. Fresh fields of relieving and curing disease have been opened up at every point of our horizon, and in all the busy centres of the earth is springing up a new race of surgeons, who effect as part of their everyday work marvels of cure that even thirty years ago, had anyone ventured to forecast them, would have been looked upon as the dreams of a visionary.

It is not merely surgery that has undergone a revolution. The discoveries of Lister are changing the aspects of medicine, midwifery, pathology, and many other provinces of medical science, and creating new departments in them; they are, as they develop themselves, shaping our sanitation, our modes of life, our relations to the lower animals, and even raising questions that may profoundly affect the value of our colonies and dependencies. Year by year their power becomes more widely felt, and promises to extend yet further beyond what we can now foresee. But to follow out this train of thought would lead me astray from the practical purpose I have in view.

It is after all perhaps in our surgical hospitals, where they had their origin, that we witness some of the most impressive effects of Lister's doctrines. These homes of the sick poor have been reconstructed and reorganised in accordance with the principles he taught, until nowadays, in our own and in all civilised countries, the most advanced, the most deeply scientific, the most marvellous and delicate methods of cure are daily practised and placed at the service of our fellow-creatures. There is hardly anyone in this land, however humble and however poor, who, when stricken by a disease that modern surgery can grapple with, finds it beyond his power, if he possess the will, to convey himself to where some surgeon, skilled in all that is most powerful to aid him, may bid him be of good cheer, and hold out to him no doubtful chance, but well-nigh the certainty of a safe and permanent cure of his malady. Those who live near the remoter districts of Britain, where men are few and help most distant, can best realise the influence of Lister and his teachings in bringing safety and cure within the reach of all, where before him no remedy existed.

It is, moreover, I think, impossible to avoid the conviction that the open-handed beneficence we now witness in the increased interest and support extended to public charities in all their forms, by all the liberal and benevolent, from the artisan to the occupant of the throne, has been in no small degree evoked by the great work he has enabled the surgical and nursing professions to carry out.

Are we now, however, with all this, in a position to look confidently around us and challenge the verdict of the world and of posterity on the use we are making of our increased knowledge? Have we done all that it is our duty to do? It is three-and-twenty centuries ago that the wise and practical old Greek wrote: "Medicine is of all arts the most noble; but, owing to the ignorance of those who practise it, it is at present far behind all the other arts." We can picture to ourselves how great would be his rejoicing could the Father of Medicine see those things which we now see; but the reflection will obtrude itself at times like this, would such as he find us in all respects worthy of our opportunities?

Powers and privileges, bequeathed to a profession like ours, entail responsibilities which it is a sacred duty to fulfil, and this is felt and admitted by all the nations of the world who lead the van of progress. Our own country, which can boast of having produced the great reformer who is yet among us, witnessing the fruition of his work, is under a greater obligation than any other to profit by his discoveries; and it may be well, leaving the unalterable past that has gone from us, to make use of the present occasion to consider if we are sufficiently discharging our whole duty in this respect towards the immediate future, in which it is still ours to think and act.

THE UNSATISFACTORY CONDITION OF THE SERVICES.

While, in many respects, we have good reason to praise the age we live in, and the way in which it has availed itself of

its advantages, no one fully acquainted with the state of surgery in our land can fail to be impressed by the fact that in some quarters the changes and modifications necessitated by the progress of science are even yet meeting with obstacles that ought not to exist, and that some of our medical and surgical brethren are still hampered by systems and restrictions which must be swept away, if we are to ensure that none of our fellow-countrymen shall be denied those benefits which are now within the reach of the humblest and the poorest. I venture to believe that in the city of Portsmouth it will not be out of place—perhaps even specially appropriate, to advert to the condition of our Army and Navy Medical Services. These, since the surgical world was stirred to its depths 30 years ago by the doctrines of Lister, have been, I fear, gradually falling into a condition that cannot fail to evoke much anxiety regarding their present and future. I believe the causes of this can be more accurately pointed out than has heretofore been possible; I feel sure that, by endeavouring to do so here and now, more good is likely to be attained than would result from a similar inquiry on any less public or representative occasion; and it appears to me that the present time is suitable, beyond any in the past half-century, for drawing attention to the reforms that may be necessary to ensure that, when the supreme moment arrives, the medical departments of these services will be found adequately prepared to undertake the duties they will be called upon to discharge. We possess at the present moment an enlightened Minister at the head of the War Office, to whom we owe it that many desirable reforms have already been introduced into the Army Medical Service. We have also every reason to believe that the trend of public opinion is favourable to such further improvements as may be required in both army and navy. Recent events, too, have demonstrated that we may be unexpectedly called upon to engage with both army and navy in European or even world-wide wars, such as would put their efficiency to the severest possible test.

It is moderate and reasonable to expect that the medical departments of the army and navy shall be in a condition commanding the respect and approval of the medical profession and the public; that their officers shall be at least as favourably placed in regard to their work as their civil brethren; and that both ashore and afloat they shall be able efficiently to perform their functions in time of peace, and fully prepared for the eventualities of war. Yet no observant member of the profession, particularly if connected with one of the medical schools whose graduates used to furnish many candidates to the services of the army and navy, can have failed to observe how changed is the estimation in which they have come to be held during the last three decades. The most talented graduates have ceased to aspire to enter them, and it has by degrees come to pass that few indeed, and these as a rule of inferior qualifications, can be induced by any means to present themselves at their entrance examinations. Such a one will have noted that those medical officers who possess a few years' experience of the services, however much loyalty seals the lips of most of them and influences all, show themselves disappointed and discouraged with the professional life they have to lead, admit they have made a mistake in entering them, and would gladly, were it possible, sacrifice the years they have spent in them and quit them entirely, even for some comparatively unpromising post in civil life. He must have perceived that many of the most intelligent officers who remain in them are pervaded by a conviction that their abilities have been thrown away and their lives wasted, and that the services are not what they ought to be. He will have followed the continual endeavours made through all these years to remedy their growing want of attraction for men of ability, and the failure of these endeavours one after another. He will have learnt that year by year the medical services, especially that of the Queen's army, have become more attenuated and undermanned, so that an undue amount of foreign service, at the cost of health, is entailed on those who enter; and that hence it has become necessary to supplement the deficiencies at home by employing civil members of the profession, of a class whose work unfits them for forming officers of the stamp needed in the event of war, even if their other engagements rendered it probable they would consent to be so employed. He may, perhaps, have been told that in the

last year or two the post of medical officer in the army has been going a-begging, and been hawked for presentation about the various schools and universities, where suitable men might be supposed to exist. And, lastly, he may see how, when lapse of years has earned them a moderate pension, many of the medical officers, in the prime of their abilities and best working period of their lives, hasten to quit the services; but find themselves, save in the instance of a few gifted men, unfitted for any professional activity, so hopelessly have they fallen behind the acquirements of their civil compeers. There cannot be such smoke without fire.

THE ARMY MEDICAL SERVICE.

It has sometimes been asserted that, in the opinion of foreign judges, our Army Medical Service is in a state of efficiency enabling it to discharge its duties in a way superior to anything that could be achieved by other countries. One must, however, discriminate. Oft-repeated experience, over the very same ground, has indeed taught us to conduct, in some respects, the medical part of expeditions in the jungles and swamps of West Africa, the deserts of the Nile, or the ravines of the Himalayas, in a way that probably no other Power could excel or even equal. Our enemies there are poorly armed and our casualties few. But it dare not be inferred from this that we are in a condition to deal with a war against a Great Power, with arms and organisation at least equal to our own, in which large numbers of wounded—thousands instead of tens—must fall to be treated. That would be a most erroneous conclusion, and would not be the general verdict of either the civil profession or the ranks of the services themselves. And such of us as possess friends among foreign military surgeons, men of large experience in actual warfare, do not hear from them any such expressions of approval as would warrant very sanguine inferences. It is absolutely conclusive on this subject to recall that last year, when a deputation from the British Medical Association was received by the Secretary of State for War, its members, most of them leading authorities from our universities and medical schools, expressed themselves deliberately to the contrary effect, using expressions that ought to be well weighed as coming from those whose position enables them to form an unerring judgment. An eminent President of this Association there gave utterance to the following ominous opinion: "If there were to come a time of war it is to be dreaded that the horrors which occurred during the Crimea may be repeated." All others present spoke to a similar effect, and the Secretary of State admitted that, owing to the condition of the Army Medical Department, "only comparatively inferior men present themselves.....the best men turning away from the Army Medical Staff.....a very grave condition of things."

With regard to the duties in time of peace, it may be contended that these, being chiefly to maintain our army and navy in good health, are efficiently performed in the services; though I need not repeat that even these are at present carried out in the army to some extent by the aid of civil practitioners, whose other occupations unfit them for being effective and satisfactory army medical officers. But it must not be forgotten that this is not all the country expects. The duties of the Royal Army Medical Corps and Royal Navy Medical Service involve preparation for war. This is the chief end of all departments of the army and navy; and, unless they fulfil that end, no matter how creditable they may be in other respects, they are but a pretence of what they ought to be. In this it must, I think, be admitted that they are in a condition leaving much to be desired. Attendance on minor ailments, trifling complaints, and the few serious diseases and injuries occurring among bodies of men in the prime of their age and health, selected for strength and soundness, and the other routine duties, which together constitute the whole ordinary work of the immense majority of the medical officers serving in our forces, form so great a contrast to much that would be expected of them in an active campaign against European troops that comparison between them is hardly possible. They afford the army and navy surgeon, it is no exaggeration to say, scarcely any chance of acquiring the knowledge and skill that would be demanded of him in war.

No surgeon can now, as in former days, rise suddenly out of the ranks of those destitute of special training, however emi-

nent his natural abilities may be. He who is skilled in exercising his profession becomes so by many years of special training. No man who is but theoretically acquainted—be it in ever so perfect a fashion—with the mere doctrines of antiseptic surgery is able to step at once into the arena as a practical surgeon. He must, in the first place, acquire by slow and painful degrees a familiarity with methods, manipulations, and procedures built up of a multitude of little details. It takes him many years to acquire these by practice, by training himself alongside of those to whom they are already familiar, by the discipline of his own failures, and by a study and familiarity that eventually imprint them so deeply that they become a part of himself, and are carried out instinctively and unerringly under all ordinary conditions, as well as in the unusual events and emergencies that continually arise in so many of the cases he treats. Septicity is an enemy of infinite variety, not to be combated with success by theory alone, or by wielding a single weapon; the modern surgeon must be armed at all points, both for offence and defence, and acquaintance with his weapons and their powers is not attained save by a long course of study and training.

Even after the ordinary practice of surgery, as nowadays carried out, has had its foundations laid by a training in antiseptic and aseptic work, the greater part of the education of the skilled surgeon has yet to be acquired. The methods of cranial, thoracic, and abdominal surgery are necessarily, to meet the varying circumstances, so numerous, so intricate, and demand so great intellectual and manipulative skill, that only one who has spent years in constantly improving himself in them, whose mind has been fashioned by long experience and study of the problems he daily meets, and whose hands have gained by constant usage the technical facility and delicacy indispensable to success, can with impunity venture into these territories with the requisite boldness and confidence, and ensure the successful results which alone render these procedures justifiable. Such is the life-long training of the skilled surgeon of our cities and hospitals, who carries out the marvellous methods and obtains the wonderful results of modern surgery.

THE STANDARD OF MILITARY SURGERY.

A standard of work at least equal in excellence to that of the civil surgeon ought to be expected of army and navy medical officers. Senn, of Chicago, chief operating surgeon with the United States army recently in the field, and one who has done much for surgery, points this out in the following axioms:

1. That in theory and practice military surgery is equivalent in every respect to emergency practice in civil life.
2. That the wounded soldier is entitled to the same degree of immunity against infection as persons in civil life suffering from similar injuries.
3. That all formal operations in war must be performed where the wounded can receive the full benefit of aseptic and antiseptic precautions.
4. That operative interference is indicated in all penetrating wounds of the skull.
5. That gunshot wounds of the chest should be treated under the strictest antiseptic precautions.
6. That laparotomy in penetrating gunshot wounds of the abdomen is indicated in all cases where life is threatened by hæmorrhage of visceral wounds, and the general condition of the patient is such as to sustain the expectation that he will survive the immediate effects of the operation.

These are reasonable demands, many might ask more, but nothing that falls short of some such standard can be accepted as satisfactory. Statistics prove that of all wounds in battle there are 7.4 per cent. of the brain, 7.5 per cent. of the chest, and 4.7 per cent. of the abdomen, amounting to 20 per cent. of all wounds. There must, therefore, in the next great campaign, be an enormous field of usefulness to properly trained antiseptic surgeons, and a fearful waste of life if they be not there to occupy it. It scarcely, moreover, requires to be pointed out that gunshot wounds of other parts besides those of head, chest, and abdomen offer a field for modern surgery that has scarcely yet been entered on. No extensive campaigns have been conducted since antiseptic surgery was fully introduced, but the smaller ones have shown the need for a class of surgeons more highly

trained than hitherto to carry the best methods of antiseptics into the domain of gunshot wounds, where septicity is a danger greater and more frequent than in any other class of injuries whatsoever. And I am convinced, from a study of wounds inflicted by modern projectiles, on which it would be out of place to enter here, that in gunshot wounds of the soft parts and extremities a very much larger proportion of lives and limbs than hitherto can be saved, and another great field of modern conservative surgery opened up by the application of improved methods and principles of treatment, in the hands of those who really know how to employ them.

In all that pertains to surgical work, it will not be questioned by those aware of what is now required, that our military and naval surgeons have, in peace, virtually no training to fit them for what they may at any instant be called upon to undertake in war. Who that compares the conditions under which the civil surgeon is formed with those existing in the Royal Army Medical Corps or the Royal Navy Medical Service will be so bold as to say that the latter furnish any adequate means of familiarising their surgeons with the highly complicated and difficult procedures which they ought to be able to carry out with dexterity and success? Save a few connected with Netley—and perhaps Haslar—Hospitals, most officers have hardly once in their lives an opportunity of carrying out any important operation on the brain, thorax, or abdomen. How, then, can they undertake, with any prospect of a happy issue, the intricate steps of, say, a laparotomy in a gunshot wound of the abdominal contents, with all its complicated problems and perils? Under the existing system no junior officer of the Royal Army Medical Corps has any opportunity of practising modern surgery; even if an occasion offers, he is tied down by restrictions and impediments enforced by his seniors, and his natural desire to prepare himself for the highest work is disregarded and repressed, so that few, if any, are capable of the class of surgical work which will be expected of them by the country, and for the non-performance of which they will be unjustly blamed when the test of war is imposed upon their performances. So long as the medical services afford their surgeons no proper facilities for acquiring and maintaining a competent knowledge of these highly-important and necessary matters; so long as the junior medical officers have neither the chance nor the encouragement to perfect themselves in their science, and especially in what would lie before them in the event of a war; it can hardly be wondered at that a service entailing on those who enter it what is, from a professional point of view, almost an intellectual sterility, should be a mode of life our best graduates recoil from, and which few of them can be persuaded to adopt.

THE WANT OF ADEQUATE TRAINING.

Moreover, the destitution of the army and navy of institutions where surgery can be practised is very great. Netley Hospital, limited as it is to the treatment of soldiers, and Haslar to that of sailors, do not offer such varied material as is required by surgeons and physicians to cultivate the practical branches of their art. And there is an almost total absence of hospitals and lazarettos throughout the stations where medical officers are serving, of a kind fitted to afford them any of the facilities they have a right to expect. The provision of places of study and practice is imperatively called for, where the younger and middle-aged officers, provided with all the appliances found in civil institutions, and with every class of patients on whom they may be used, may fit themselves for their duties of attending the wounded during action or in field or base hospitals. And until such provision is made, we may be assured the services will not secure the number and quality of officers they require; for graduates will not nowadays, after being fashioned by years of high mental training, consent to exchange an intellectual profession for a life of stagnation. The services must either adapt themselves to the altered spirit of the times, or remain undermanned, and officered by a class of graduates inferior to those who would otherwise enter them. It is written, "Man shall not live by bread alone."

Had custom not dimmed our eyes, the position of matters in the army and navy would ere now have excited indignant surprise. While the calls of modern science have been heard in the surgery and medicine of civil life, and effected the changes to which I have alluded; and while they have been

taken to heart in the medical services of foreign armies and navies, they have fallen on unheeding ears among those responsible for the efficiency of our own. The contrast between the medical and other departments makes the matter more astonishing. Such scientific corps as, for instance, artillery, engineering, and telegraphy have undergone extensive improvements and reforms in the last few decades. No means of enhancing their efficiency is neglected. For them all the inventions of modern science are studied, adopted, and improved. Elaborate care is taken that every one whose duties in war time will necessitate his familiarity with appliances or knowledge of any kind is trained in them, so that when the call of war is heard perfect efficiency shall have been attained. The lives of the officers and men of the navy, of the Royal Engineers and Artillery, of the cavalry and infantry, are devoted to the daily acquirement of a knowledge of and familiarity with what they must use in war, attainable only by constant practice under conditions resembling as nearly as may be those of a real campaign. Tactics are studied, manœuvres held, officers and men practised and drilled, fleets and bodies of men are put in motion, and any unreadiness is observed and remedied. Yet the Royal Army Medical Corps and the Royal Navy Medical Service, which demand an even higher and more varied culture, a more profound knowledge, and a greater degree of practice and experience than either artillery or engineering, ere their delicate machinery can be brought into salutary use, are left in a condition which may have answered well enough fifty years ago, when rough-and-ready surgeons could do the rough-and-ready work then required, but which is out of harmony with the revolutionised conditions of modern surgery and the state of the medical service of the armies and navies of rival military powers. Even the care that has been bestowed on the development of ambulance will only result in wounded men being now brought, on the best surgical principles, to surgeons rendered as unfit to treat them as it is possible for a bad system to make them. Were the Engineers or Artillery treated thus, supposing that their officers, after acquiring the highest scientific culture and technical education that military academies can afford, were, on obtaining their commissions, to be denied any further opportunity of maintaining and increasing their familiarity with the ever-improving appliances, constructions, weapons, and manœuvres that war will compel them to employ, the absurdity would arouse universal derision and enforce an immediate adoption of a saner system. Yet that is precisely what we witness in the medical services, where the problems dealt with are even more scientific and recondite, and in which constant practical application is even more necessary.

These defects tend to their own perpetuation. Save in the case of a few exceptional men, medical officers trained under such conditions must, by the time they reach the higher ranks, where they possess to some extent the power of introducing reforms, necessarily have become so unfamiliar with the progress their science has been making, and so unaware of what ought to be done in the way of modernising the services, that we cannot wonder they should be slow to move in the direction of effecting the necessary changes. Again, though numbers of the best men in our profession are in the ranks of the services, and many there carry out work of the highest order, it is nevertheless true that such men exist in them, not owing to their opportunities and encouragement, but in spite of them, and have become what they are owing to intellectual forces within themselves, which in any other line of life would have ensured the highest eminence and the greatest success. And it is unfortunately the case that the standard of acquirements of the successful entrants into the Royal Army Medical Corps of the last series of years has been such as to compel the belief that the proportion of eminent men is already becoming less than it has hitherto been, and that the service is undergoing rapid deterioration.

In considering the requirements of the services I have not overlooked that, along with purely surgical work, a very large amount of medical and sanitary duty falls to be carried out by the medical officers in the event of war; but time does not permit of everything being elaborated, and my standpoint being chiefly surgical, I must limit myself to saying that, for these also the opportunities of practice in peace are not such as they ought to be, and that the causes of this are similar to

those stated regarding the purely surgical aspect of the services.

CAUSES OF DISCONTENT IN THE SERVICES.

The present system has had a sufficient trial, and, in spite of all attempts to amend it, has yielded unsatisfactory results, mainly owing to the deficiencies indicated. The Royal Army Medical Corps and Royal Navy Medical Service, indeed, are at present existing under impossible conditions; they cannot be subjected to such impediments without their effects being felt in a hundred ways. They are in a state of internal discontent from the consciousness of being seriously defective somewhere. Their members realise that they do not possess the same privileges of professional occupation as their civil *confrères*, and are sensible that they are not equipped as they ought to be in following out the intellectual problems to which they have dedicated their lives. This is perceived not only by themselves but by others, especially by the other scientific branches, and naturally they do not enjoy the same appreciative esteem as is accorded to departments engaged in the constant healthful exercise of all their due activity, and possessing the internal vitality and self-respect resulting from conscious advance in the exhilarating race of intellectual progress, which forms the very life of the leading professions in the world's foremost nations. It is certain, too, that the same cause underlies what has often been complained of, namely, the cold regard paid by the military and naval authorities to the medical services, their lack of appreciation of them, the way in which they are starved in their pecuniary requirements, and the fashion in which their exercise and training during peace are overlooked and neglected. They would seem to be considered as less deserving of development than even such departments as the commissariat and transport—the contemptuous belief being apparently held that trained surgeons to attend the wounded in war can be summoned into the field at a moment's notice by the expenditure of so much money, like the horses, mules, and camels that an army requires.

THE ARMY MEDICAL SERVICE UNDERMANNED.

This condition of things is one from which there must some day be a rude awakening. It may be true that in former days an army medical service could be so extemporised, but it is so no longer. The Royal Army Medical Corps ought to be made, what it at present is not, a complete and perfect entity, fully equipped with everything needful, and regularly trained like any other department. If it is to furnish the priceless service for which it exists, it must be fully manned, the members composing each of its units must be accustomed to work together, so that their duties are familiar and can be promptly performed, and the whole of its equipment must be prepared in time of peace for instant employment in war. Instead of this we have a department so starved and undermanned that, as the Under-Secretary for War recently admitted, in the event of a war breaking out requiring the employment of two army corps we could not supply them with the requisite medical contingent. Let me give an example of how the Army Medical Service worked in an expedition of some 11,000 men, sent under Sir Gerald Graham to the Eastern Soudan, and landed on the Red Sea littoral in 1885. Following as it did on the death of Gordon at Khartoum, when the country was roused into excitement, many millions were spent upon it, and it was furnished with everything, even to, hospital ships, at profuse expense, nothing being wanting to its medical department that money could supply or care provide. Yet in the bearer companies the men were from Aldershot, the carts and harness from Woolwich, the mules and muleteers from Spain, dhoolies and dhoolie-bearers from India, and camels and camel-drivers from Aden. The waggons arrived in one ship, the harness in another, the mules in a third, and all at different times. When the ambulance waggons were landed, along with several carts, the pieces were mixed up, and the men had to fit them together as best they could. When the mules and harness turned up, it was found that, while the waggons were made for one kind of draught, the harness was made for another, and so on. And the officers, non-commissioned officers and men knew nothing of one another.

For the medical part of the expedition generally, the stores came without storekeepers, and without proper outward indi-

cation of what the packages contained. Chaos reigned, and I am assured that if there had been an engagement on the day the forces landed there would not have been a bandage forthcoming for the wounded. And very much the same state of matters exists in the service to-day.

To manage in this fashion is simply to ensure, when a critical time occurs, a repetition of the scenes of the Crimea, where admirable medical officers were made a sacrifice by the war authorities to appease the public indignation excited. A system that produces such results stands self-condemned, and none who remember the Crimean War will consider any efforts to prevent a repetition of like experiences ill-timed or unadvisable.

So complex an organisation as the Royal Army Medical Corps ought to be kept in a high state of efficiency, and be vitalised by continual practice. It ought to consist of separate units, each complete in itself and familiar with its equipment and work. Each field hospital should be completely furnished and frequently practised in its duties. Every corps should be ready to act, as in other departments, the moment it takes the field, and not have to learn its duties there when the day of trial comes in a campaign. Whether stationed at home or abroad, the officers should be provided with all the proper means of keeping themselves informed regarding the advances that are for ever being introduced into their science. The literature bearing on every new progress should be supplied to them at remote stations where scientific periodicals and books are not found; for no medical officer can, from his pay, purchase and transport a library of the newest medical works, even if he were aware, which he often cannot be, of what he ought to procure. The want of all these things prevents the due development of the services, and there can be no reasonable hope of a better state of matters until they are remedied. But were the reforms that naturally suggest themselves carried out, who can hesitate to believe that new life would be infused into them? The best graduates would once more flock to and remain in them; and the country would not be placed in the dreadful position of having to pay, with the lives of its bravest and best, for the state into which its medical services have been allowed to drift.

THE INDIAN MEDICAL SERVICE.

It is not necessary to enter into many details concerning the Indian Medical Service. To some extent it shares in the defects of the Queen's; but opportunities of professional work are more frequent, two-thirds of its officers being engaged in civil work; and it therefore affords a professional training that places it in a much better position, and approximates it in some degree to the condition of Continental army medical services. Its comparative popularity is a strong corroboration of the remarks I have just made, for it attracts the best graduates of our medical schools, so that the weakest men who enter its ranks are of a class superior to the best who enter the Royal Army Medical Corps.

THE ROYAL NAVY MEDICAL SERVICE.

The Medical Department of the Navy, on which I have already partly touched, has, no more than the army, kept pace with the advance of the times; it still preserves an organisation that may have answered its purpose well enough in the first half of the present century, but is inadequate to meet the requirements of to-day.

In it, as in the army, the fundamental error is perpetuated of adhering to a system whereby its officers, shut out from practising their profession as civil surgeons have to do, fall year by year more out of touch with the advancing requirements of science, and necessarily fail to familiarise themselves with what will be their great duties in the event of a naval war. Treating none but the healthy and strong in time of peace, their opportunities of dealing with wounds, and especially with the higher branches of surgery, are as good as non-existent; and they cannot by any possibility, as things are, acquire the skill everywhere possessed by surgeons engaged in civil work, but which would in war be equally demanded of them. Such as it is, their work has to be carried out under arrangements that seem deliberately calculated to render the practice of antiseptic or aseptic surgery impossible, in rooms without antiseptic materials, irrigators,

or sterilisers, and with a limited armamentarium of instruments provided, even at the present time, at their own expense. Proper diagnostic instruments and apparatus do not exist among them; even the surgeons, in the best equipped vessels and stations, are left destitute of the facilities that are wanting in hardly a single civil hospital or dispensary for the poor throughout the length and breadth of the land.

Nearly all that has already been stated regarding the Royal Army Medical Corps is at least equally true of the Royal Navy Medical Service; but to enter *seriatim* into these matters again would be an unjustifiable waste of time. More than the army the navy requires the touch of a reformer's hand. I should be sorry to use any word that may give needless offence, but am forced to say that, even on board the most modern ships of war, a comparison of their surgical outfit and arrangements with the varied armamentarium and the conditions of work of the civil surgeon tends to evoke a vision of the knight of La Mancha equipped in his great-grandfather's suit of armour. When we consider what the medical officers of the navy may at any moment be called upon to do, and their vast importance to the country, we feel that they, of all others, ought to be almost lavishly supplied with the best facilities for work, with instruments and apparatus of all kinds, instruments for special diagnosis, instruments for special operative procedures, endoscopes, electrical instruments, radiosopic apparatus, sterilisers, and apartments where antiseptic and aseptic surgery can be practised; and have reasonable opportunity, in time of peace, of familiarising themselves with their use. The highest care should be bestowed on fostering the British, of all the naval medical services in the world, and we can scarcely believe that this is not done.

THE WOUNDED IN NAVAL WARFARE.

In the event of a naval engagement of any magnitude the wounded on board our ships of war would have to be attended to in a small dark room, unprovided with any save the rudest appliances and a few cots, where at most half a dozen men could be handled, and which is moreover, in many vessels, as much exposed as any other part of the ship to the fire of the enemy. Were such a fighting bay rendered untenable the wounded, however great their need, could be attended to only by being lowered, slung in a vertical posture, down the narrow hatchways, where the shot is brought up from the magazines to the guns, and even these would not be available during the heat of an action. Everything on board ship that can destroy life is in the highest perfection, everything that can save it is of the rudest description and behind the age. In the case of a gunshot wound through the abdomen the only chance of recovery is laparotomy performed within twelve hours, but on board none of Her Majesty's fleet is there any possibility of performing such an operation; there are neither accommodation, instruments, nor accessories. Or were 20 per cent. of the men of one of her battleships or cruisers killed and disabled in action, the wounded among them could not, in the present state of things, receive the attention that ought to be given them.

Yet there is no reason why the constructors of the navy should not arrange under the water line, shielded from the enemy's fire by the turtle-back armour deck of the vessel, a sufficiently large and well-lit space, fitted with all that is required for wounds, compound fractures, and operations on the main cavities of the body. Into these the wounded could be lowered through hatchways made capable of transmitting men on stretchers or litters even in the midst of an engagement, so that all emergency operations could be satisfactorily performed.

Matters are even worse on board the smaller vessels, which have no surgeon and few surgical appliances. On torpedo boat destroyers there are no materials for making splints, only a box of antiquated remedies like those supplied in the vessels of the mercantile marine, where the sailing master acts as the doctor. It would not sensibly retard the speed of such a boat to carry a surgeon—or at least several men specially and fully instructed in first aid, and really capable of efficiently affording it—and to furnish such appliances as would enable them to deal with wounds and compound fractures.

The requirements of naval warfare must always, more or less, impede the carrying on of surgical work on shipboard

during naval actions. No person will impugn the principle that the efficiency of war vessels as fighting machines has first to be considered, and as much accommodation as possible allotted to their fighting armament. It is inevitable this should be the chief consideration in fitting out the navy. To keep the communicating doors of water-tight sections open during action, in order to convey the wounded to the surgeons, might cost the lives of all on board. It may also be that in naval warfare, especially in some vessels, success may occasionally best be purchased by throwing aside, for the time being, all considerations of dealing with the wounded. But the principle may be, and is being, carried too far; for it is a duty to see that, short of interfering with the perfection of the fighting machine, no suffering is left unrelieved or life needlessly sacrificed, and no means neglected of bringing wounded men the earliest and best attention that can be given. No questions of economy should be allowed to prevent officers and sailors wounded in naval warfare receiving such early and effectual help as their condition so urgently demands. The cost of a couple of twelve-pounder guns would probably cover all that is required for each ship. We must lead rather than follow in all naval matters, as foreign ships of war are constructed according to the example England sets. And our navy, being the most perfect and greatest destroying force of all the war fleets of the world, we should be the foremost in introducing into it the best planned methods of relieving suffering and saving life that can be devised.

More than three centuries ago one of the maiden Queen's wisest advisers wrote thus to Secretary Cecil, and his words, though quaint and antique, are as apposite to-day as they were in 1560:

In any wise bend your force, credit, and device to maintain and increase your navy by all means you can possibly, for at this time, considering all circumstances, it is the flower of England's garland. Animate and cherish as many as you can to serve by sea; let them want neither good deeds nor good words. It is your best and most cheap defence, and most redoubted of your enemies and doubtful friends. There is not so many perils in it as there is to depend on fortresses; neither be the charges like. Surely at this time it is so necessary to increase and to preserve it, that immunities and privileges are to be granted to those that serve in that kind of service.

Does any one doubt that these old words still breathe England's spirit, or believe that she will grudge to provide in her fleets what ordinary humanity requires?

Lines of Remedy.

Criticisms without suggestions are usually better unmade; and to call attention to defects in the services, without indicating the lines of remedy, would be almost unpatriotic. I have already ventured, to some extent, to indicate how I think defects may be made good, though some of the suggestions have been more of detail than principle. It would be out of place to dwell at length upon minor suggestions; but it may now be desirable to state generally the lines on which the services can be brought into harmony with the requirements of modern science, so as to ensure the wounded in war the most enlightened treatment, and for the medical officers the means and training for carrying on their work in a manner that will bear comparison with that of their civil compeers.

It would be easier to do so if we possessed universal military service, as we might then look for guidance from Continental examples. In countries where this obtains the most eminent civil surgeons are at the disposal of the authorities in time of war, and in peace hold rank in the army, receiving promotion like those actively serving. They are soldiers in reserve, and can be made use of wherever their eminence and special qualifications make them most useful in war. The idea of adopting this system among ourselves, but on voluntary lines, is no new one; although it has recently been brought prominently into notice by Lord Lansdowne's creation of the Central British Red Cross Committee. If the Committee make an endeavour to attach a number of our most capable civil surgeons to the Royal Army Medical Corps, by conferring on them military rank and titles, with special privileges and emoluments, on condition that their services be at the disposal of Government in time of war, some good may be done. There are obvious difficulties, but they do not seem altogether insuperable, and, at any rate, such a plan is worthy of the attention of the War

Office. But anything short of this, as for instance, the old desultory method of inviting civil practitioners to volunteer their aid when war breaks out, and so supply the defects of the service, is doomed to failure; because, though capable young graduates are thus obtainable in considerable numbers, they are not the class of experienced surgeons who are wanted, they cannot replace the military or naval medical officers, and are at best but a species of superior dressers. Few, if any, of the men who would be of real value will come forward, save perhaps in the event of an impending national calamity. The system was tried in the Crimea, and has since occasionally been carried out by the National Aid Society: but I am sure those who have seen it in operation must admit that it is at least a comparative failure.

Neither of these methods, or indeed any other, will, however, compensate for an inefficient army or navy medical service, and should the War Office or Admiralty be induced by any such expectation to defer the necessary improvements in their medical departments, they will find when the day of trial comes that they have made a fatal mistake. But I shall have to return to this question farther on.

MEDICAL SERVICES OF GERMANY.

Although the arrangements of foreign services cannot be directly adopted in our own, they may teach us how to improve them, for we find most of them imbued with a recognition of the altered conditions of the surgery and medicine of to-day, and making progress in adapting themselves to these changes in a fashion that is not found among ourselves. Much that is instructive may be learned from the medical services of Germany, where, of course, compulsory service exists. In that empire every medical man who has served possesses a fixed military rank, even if engaged in civil practice, and is liable to be called upon to serve where and when required. Those who have not served in the regular army, but are in private practice, receive annually an inquiry addressed to them by the War Office as to whether they are prepared to serve their fatherland in case of war. Every German medical man who has served in the army at all is maintained for nineteen years under military orders—that is, he possesses a fixed rank, and is allotted, even in time of peace, a known military post which he would occupy if war broke out. Thus the university professors hold high military rank, corresponding with their eminent civil position and scientific attainments, and are required to give annual courses of instruction to the medical officers serving in the army or navy. Such well-known surgeons as Bergmann, Bruns, Trendelenburg, and Mikulicz have to teach these classes during the Easter holidays, so as not to interfere with the winter and summer sessions of the universities. Each professor has his fixed military rank assigned to him in case of war; most of them rank as lieutenant-generals, some as generals, and even higher, and in the event of war they act as consulting surgeons to the medical officers of the army in the field or base hospitals. They receive the same pay as the military surgeons, as do also the other surgeons who are liable to be called out in case of war; and some of the latter have places assigned them in the sanitary corps, etc., so that their skill and experience are utilised in every department of the service.

In time of peace German army surgeons have the development of their professional culture ensured by the following measures: The most promising surgeons and assistant surgeons are sent to do duty for a year at a time in the medical, surgical, and gynaecological departments of the hospitals connected with the universities, and in other large public hospitals unconnected with them. The junior and assistant surgeons are also annually sent to attend the special courses of instruction in anatomy, surgery, and operative surgery mentioned above. The senior medical officers, nearly corresponding with our surgeons-major, at least the most competent and promising of them, have to serve in rotation in the large military hospitals, in which are treated, not merely soldiers, but all kinds of ordinary patients; there they have to act as teachers and attend and take a share of the tutorial work among the pupils in the classes of the various professors; or they may be sent to do duty for a year in the general hospitals, not only in the surgical, but also in the medical and gynaecological wards. They have also to attend, as they may

be ordered, annual courses of bacteriology; or they may be furnished with funds for travelling in other countries and studying their medical and sanitation arrangements.

All surgical instruments and appliances in the German army are provided by the State, and in their navy this is likewise the case; every hospital in which the medical officers serve has its complete armamentarium provided for it, so that no unwise economy hampers the most thorough and modern practice of the healing art; and the same thing is true in regard to their naval medical service.

MEDICAL SERVICES OF RUSSIA.

In the Russian army and navy similar care is taken of the professional culture of the medical officers. Russia possesses 6 large and 300 small hospitals connected with the army, besides smaller lazarettos; and in some of these the equipment is far in advance of anything the services possess in this country. Thus the military hospital of St. Petersburg, wherein are treated all medical, surgical, gynecological, ophthalmic, and other diseases, consists of five separate clinics or infirmaries, each of which is complete in itself, and possesses departments for every class of disease, and even wards for paying patients. The wards are excellent, and replete with appliances of every kind; and there are bandage rooms, purifying rooms, operation theatres, bacteriological departments, rooms for physical research, laboratories for teachers, and laboratories for students, all excellent and complete. Each clinic possesses 850 beds, 120 of which are for women's diseases, and 20 for children's; and about 45,000 patients are treated per annum. In these clinics the students and assistants have to work in the most thorough manner, and study every kind of case. The hospital possesses a staff of 34 professors, 70 *privatim docentes* and 47 assistants. Each department is furnished with an ample annual allowance for instruments and apparatus, and can apply for and obtain additional grants for anything more that is required, or for anything new and expensive. They have liberal provision of everything calculated to assist the most advanced work and investigation: x-ray rooms, photographic rooms, electrical rooms, immersion lenses, centrifuges, etc., to an extent that excites the marvel and envy of British visitors. The work in the wards, such as case taking, temperature recording, and every sort of examination and study of the cases, is of the very highest character; and the operations and dressings are carried out by the surgeons and qualified assistants in a fashion that is above praise.

Russia has 3,000 surgeons in her army, and any of these may, if he show ability and powers of work, apply for and be ordered to return to study in the hospitals for a period of two years. There he has to work as a regular assistant, and on proving his capacity may attain a place among the teachers of the institution; or he may be transferred to the hospital of some provincial city, and there continue to perfect himself in his profession, and further qualify himself for his duties in time of war.

The Russian naval hospitals are arranged like their army hospitals; they exist in many parts of the empire, there being five large ones at different ports, besides one or two smaller ones; they admit civil cases of all kinds; and in them the medical officers possess opportunities of training themselves in all manner of high-class professional work. In the Russian navy the medical officers who show ability can obtain permission to return for two years to the hospitals, and can there advance by merit, ten every year, to become *privatim docentes*, and so proceed to the position of professor. And they have the same privilege as those of the army of obtaining, after ten years' service, two years of study leave in the hospitals and schools, during which time they are granted extra pay.

The Russian State supplies its army, its navy, and their hospitals with instruments of the newest construction, embracing appliances for special diagnosis and treatment; the operation instruments, and even the boxes that contain them, are arranged so that they may be readily sterilised by heat or otherwise; and Schimmelbusch's sterilisers, and apparatus specially constructed for carrying out antiseptic and aseptic treatment under the difficulties of a campaign, are supplied with them. The drugs are prepared for the services in the form of tabloids, with the active principles accurately dosed and made up by the newest machinery. Dressings,

bandages, and such like are prepared, sorted, made up, sterilised, and sent out from factories which are ideals of purity, ingenuity and care, in a way that is an example to the world.

MEDICAL SERVICES OF FRANCE.

In the French army post-graduates courses, expressly for medical officers, are conducted by professors at the different universities throughout the Republic, and the cost is borne by the Army Medical Department; while a certain number of the medical officers of the active and reserve army are every year ordered to attend them, extra pay being drawn by those who do so.

A SCHEME OF REFORM.

But enough has been said to show that we have much to learn from foreign countries; that, unless we follow their example, our officers, soldiers, and sailors who may be wounded in war will be attended to in a very imperfect fashion compared with those of other European Powers; and that our services stand in need of great reforms, which must be more or less of the following nature.

It would, first, be a great advantage to the services were a Section created for military and naval surgery at the annual meetings of this Association, in which all professional matters connected with them could be discussed, and where all communications should be privileged. There can be little doubt that the responsibility for the defects of the services chiefly lies in the apathy and ignorance of the civil part of our profession regarding them, and this is the first thing that should be remedied. Such a Section would furnish instruction as to the actual state of matters and what amendments are required, and by its agency the profession and public would be educated to obtain them. Reforms so initiated and urged on the authorities by the Association could not fail to be quickly introduced. In such a Section also questions of ambulance, transport, equipment, wounds, and subjects of a kindred nature would be perennially dealt with. And special work by medical officers would secure due publicity and appreciation.

Information as to the condition of the services should be laid before the War Office and Admiralty, and the necessary reforms urged upon them in all proper ways, in order that their organisation and equipment may be modernised. The War Office in particular should be induced to carry into complete effect the system initiated when the regimental system was abolished. Medical provision should be made for three complete army corps. This, if it exists at present, is a mere framework on paper, of no real use in so complex a machine as the Royal Army Medical Corps. The number of those who are to serve when war breaks out should be completed; the equipment and materials should be ready and at hand; and men and officers frequently trained in their use. Field hospitals should have their equipment complete, and their staff attached to them. And the whole service should be organised as a body of independent units, capable of acting alone or being combined or brigaded as required. Everything belonging to each unit, even to its transport, should be complete and under the command of its medical officers. This would give the military authorities a medical corps on which they could always depend, out of which they could be supplied with such a proportion of units as the particular exigency required, to be distributed where and when they were called for. Such a system would throw responsibility for the adequacy of medical arrangements on those in command; and we should no longer have the Royal Army Medical Corps bearing on its shoulders a vicarious load of sins whenever a general—to use a terse vulgarism—miscalculates the size of his butcher's bill.

INSTRUCTION OF OFFICERS.

The most clamant of all reforms is provision for the proper instruction of officers in their war duties. It is the climax of unwisdom to deny them this, and not until it is fully conceded can the services regain their lost popularity and attract such graduates as will provide the number and quality of medical officers the country requires. The principle of study leave has been conceded, but cannot be carried out in a service too undermanned to do its work. And the amount conceded is, in my opinion, far too little to enable medical officers to keep pace with the advances of science. I cannot put too strongly the absolute necessity for at least one out of

every five years of service being devoted to this. Were every meritorious officer, especially if he have been stationed abroad, set free to devote every fifth year or its equivalent during the first twenty years of his service, or up to forty-five years of age, to visiting and participating in the work of military, naval, and above all civil hospitals and schools of medicine, much would be done to ensure his possessing the skill in the higher methods of surgery and medicine to which he and those under his charge are entitled to lay claim. In this we should be but adopting what has been found indispensable by other European Powers. Officers receiving study leave should be sent to act as assistants, residents, and house-surgeons and physicians to our hospitals and schools of medicine, in the same way as our younger graduates who are in training for the highest places in the civil profession. Officers from the services would be cordially welcomed in such institutions, where men of their stamp are continually in demand. There exist, besides, numberless infirmaries throughout the country unconnected with schools of medicine, where most excellent surgery is being daily done, in which they would be received with open arms and welcomed to take a share in the work. It is often most pitiful to see our graduates in the services returning to the schools where they were trained, longing for and acutely feeling the need of such work and practice, who, under existing arrangements, can only hang about for a few days and look wistfully on under every discouragement of their natural aspirations, till they have to turn away, hopeless of obtaining the privilege of mixing among the workers and training themselves in the refined surgery of to-day.

DEVELOPMENT OF HOSPITALS.

It is of the most vital importance that the development of military and naval hospitals should at once receive the attention of the authorities. The services can never be what they should until their hospitals and lazarettos, both at home and abroad, are multiplied, improved, and cherished into new life and activity. They should, wherever it can by any possibility be done, be thrown open for the reception of ordinary patients from the civil population, and for the admission of diseases of all kinds. The number of medical officers in charge of or serving in them should be largely increased, and they ought to be provided in them with fully the same opportunities as are enjoyed by their civil brethren. No more deadly injury has ever been done to the medical services than by starving and neglecting their hospitals. They are the heart of the services, and it is necessary that the authorities should be brought to recognise that this is so, and follow the wise example set by foreign nations.

HOSPITAL SHIPS.

I cannot believe it possible that the medical arrangements on board our ships of war should be permitted to continue in their present state. The succour of the wounded in a naval action is, no doubt, a question of very great difficulty on board ship, and no considerable alteration of the existing distribution of space can be claimed with any hope of its being conceded. But, without going so far as this, it is the duty of the State to provide those who shed their blood in its defence with suitable special accommodation, in as safe a situation as possible; and to see that those in charge of them are furnished with every material, appliance, or instrument that can lessen suffering, or confer an additional chance of saving life. Other Powers are more generous and wise, and a nation depending on its navy as we do cannot be pardoned for such suicidal economy.

New discoveries may possibly some day alter the conditions of naval warfare; but in the meantime it seems unlikely that any great change can take place in the general character of our fleets and warships, and a considerable naval action would certainly at present furnish such a mass of wounded men as might defeat the best efforts of the Naval Medical Service to cope with. The only means of doing so, and one so obvious that it is a marvel our country has not long since adopted it, is to provide every fleet with a certain proportion of fast steamers, without armour or armament, flying the Red Cross flag, fitted up with wards, operation theatres, and dressing-rooms, anæsthetic, sterilising, and apparatus rooms, officered by a staff of surgeons and attendants, and in every way imi-

tating the arrangements of the best civil hospitals. These should form as essential a part of every squadron as do the bearer companies and field hospitals of an army. Their duty should be to dash to the aid of ships disabled or out of action, or the moment the conflict was over; and, with the help of their trained attendants and the best forms of slings, litters, and barges, remove the wounded to the protection of the Red Cross, and render them the same attentions as those given in like straits to the injured and wounded in the army or in civil life. The cost of such vessels would be small compared with ships of war, and the good they would achieve in great naval engagements, and even in ordinary times, would be unspeakable. I am glad, since this was written, to perceive that the Peace Conference at the Hague has occupied itself with this question, and is endeavouring to secure such vessels being treated as neutrals. But, even if the Conference fail to procure their neutrality, it will not make it the less our duty to provide such vessels in the navy.

CIVIL AID A BROKEN REED.

It is necessary, also, to make strenuous war on one of the most serious obstacles in the way of obtaining the reforms required for perfecting the services—namely, the tendency on the part of the military authorities to believe that deficiencies in them can, at any time, by the power of money, be compensated by engaging civil aid. No more erroneous idea could possibly exist, as those who are acquainted with its working well know. The civil aid at present employed in various stations throughout the country is of an inferior quality, and could not, even such as it is, be made use of in war to any extent. The medical men who fill these substitutive posts, as well as those who would volunteer to aid in active service, are not the skilled and trained class who could be entrusted with the difficult surgery of gunshot wounds. The urgency of the situation has driven some to suggest that, should need arise, the duty of attending part of the wounded and convalescents could be discharged by existing civil institutions. This could never be the case to any extent; neither their accommodation nor funds could be made applicable to such purposes, save in the event of a dangerous national crisis. The country and the heads of the services must be brought to recognise voluntary aid, even such as that proposed to be organised by the Central British Red Cross Committee, cannot provide the class of medical officers required, unless that organisation were to be developed at great cost into a second army medical department, which would crush the present one out of existence, without being itself fitted to take its place. The fatal error of imagining that the Army Medical Corps can be supplemented by civil aid is one that has already done infinite harm; it has been made a constant pretext for hindering the due development of the services and producing the defects of which I have spoken, and is a mischievous delusion that cannot be too strongly combated. Were such a proposal made regarding any other scientific department, such as—say—the Royal Engineers, its absurdity would be at once perceived; but so little is the peculiar position of military surgery known to the laity, that it passes as being reasonable among many without, and some even within, the limits of the medical profession. At its best it is but a poor palliative, but can never be a cure.

FALLACIES AND FACTS.

It is conceivable that some may be found, even in the services themselves, who contend that they are not in so unsatisfactory a condition as I have painted. They can point to good work done in them but yesterday, to individuals in them whose admirable labours or brilliant achievements are well known to us all, and to evidence that special institutions or special expeditions are provided with many of the latest appliances for scientific diagnosis, treatment, or research. It would be wrong to deny, or grudgingly and unfreely to admit, these facts; to overlook the enlightened, devoted, and admirable work, or the talents and valour of numbers of our brethren in the services; or to minimise the efforts of those highly placed in them to maintain and elevate their standard. I should be very sorry to seem to do so. But let those who hold that all is well with the services visit the hospitals, depôts, ships, and stations of the army and navy, and see with their own eyes the circumstances under which the sur-

geons have to work now, and would have to work in war. Let them contrast their equipment with that of our civil hospitals, even of our minor country infirmaries. Especially let them study the military and naval arrangements of other countries, and realise the full and energetic professional life enjoyed by the medical officers of the best European Powers. They will then find no escape from the conviction that our present system is most seriously at fault, and that, without recognition of this and its timely amendment, our country will have its eyes rudely opened when the strain of war shall arrive, and the test of facts unfolds the lamentable revelation of how unfitted the services are for their great and real work. I have given sufficing reasons why I and many civil surgeons feel unable to agree with those who take a hopeful view of the condition of the services, and have striven to show that there lies before us a struggle of no small magnitude to be gone through ere we can expect to do so.

I trust it is not necessary for me to say that, under what I have stated regarding them, there lurks no hostile undervaluing of the services, or of those who are in their ranks. I have been moved by a sincere respect for them, and regard for their interests, and by the conviction that the present is a suitable time for one in the civil part of the profession to speak boldly what is in the minds of many civil surgeons, and is known to still more who are in the services themselves. "Better are wounds from one who loves than fraudulent kisses from an enemy." It has been far from my intention to reflect on the medical officers of the army and navy, numbers of whom are my own intimate and valued friends. Should I seem to have done so in any degree, then :

Sir, in this audience,
Let my disclaiming from a purposed evil
Free me so far in your most generous thoughts,
That I have shot mine arrow o'er the house
And hurt my brother.

I know well that though in the services good work gets little reward, and bad work as a rule no punishment, yet in truth there is much good work done and little bad. I have been privileged to witness those in them doing all that men can do under the most discouraging circumstances, where everything seemed to conspire against success, and have admired and wondered how well things were done. The system is at fault, not the men, and no body of men can quite overcome the impossible conditions in which the services are placed, or make bricks without straw.

But I hope my motives will not be misjudged, and that what has been said may contribute in some degree to stir the profession generally, and this powerful Association in particular, to increased efforts to open the eyes of the British nation to the real state of matters, regarding which it is at present blind ; so that when the Temple of Janus once more opens in our midst, the services may be found in such a state of preparation and efficiency as is demanded by the honour and well-being of our country and the interests of humanity.

REMARKS

DELIVERED AT THE OPENING OF THE

SECTION OF MEDICINE.

At the Annual Meeting of the British Medical Association at Portsmouth, August, 1899.

By J. MITCHELL BRUCE, M.A., M.D., F.R.C.P.,

President of the Section.

My first duty on taking the chair is to me a very pleasing one—to thank the British Medical Association for the honour which it has conferred upon me in inviting me to be President of the Section of Medicine at the present meeting. I am fully conscious of my unworthiness of this mark of confidence, but with the invaluable assistance of my friends the Vice-Presidents and Secretaries, I will employ my best endeavours to discharge the duties of my office with judgment and impartiality.

Very different views appear to have been entertained of the manner in which the Section should be formally opened. My own interpretation of the unwritten law is that the President in this matter must be guided by circumstances, and the

course which I should do wisely to follow on this occasion is to me clear : business first, reflexion after.

In addition to many very valuable papers, we have two important discussions—the one on the Tests for Admission to the Public Services, the other on Tuberculosis—both thoroughly practicable, both inspired by the *genius loci*. With a programme of this importance before us, success is not likely to be achieved by spending precious time on a review of the progress of medicine during the last twelve months, which is better detailed in the pages of the BRITISH MEDICAL JOURNAL, nor on speculations on the future of preventive and remedial medicine. The proper occupation of the Section is *work*.

Very few words from me will suffice to introduce you to the business of the next three days in this room. Our place of meeting this year possesses two eminent features. First, Portsmouth is, and has long been, one of the greatest of our naval and military centres, with magnificent dockyard and powerful defences both on land and by sea, and thus in all its relations past and present, material and sentimental, intimately associated with the fleet and the army. The first thought of your Executive, therefore, was of these two great public services ; their first desire was to afford our colleagues in the navy and army an opportunity of discussing subjects in which they are specially interested and on which they might speak from experience and with authority. No subject concerns them more intimately, and at the same time all of us as members of the profession and as loyal citizens, than the selection of the *personnel* to which the interests and honour of our country in relation to other States, and our position as one of the great civilising powers, are entrusted. The physical qualifications of all candidates and recruits are determined by them, and they are themselves primarily responsible for the admission of the boys and men whose health and efficiency they have afterwards to preserve. Your Executive have great reason to be gratified with the way in which their plan to discuss the tests for admission into the public services has been received by the Association. Such a discussion, opened by Sir Dyce Duckworth and spoken to by distinguished officers, cannot fail to be a practical success. But, in addition to these attractions, we can promise you that the high level of the discussion will be sustained by many eminent civil authorities at home ; by Professor Osler, a worthy representative of our cousins across the Atlantic, who have lately been anxiously concerned with the fitness of their own combatant services, consequent on an acute recrudescence of that Anglo-Saxon disposition to rove and conquer which has always been an endemic trouble in the Old Country ; by Dr. Manson, who will give us the benefit of his intimate and well-considered experience of the health of officers in the Far East ; by Major W. Turner, of Gibraltar ; and by Dr. Wallace and Dr. Sykes, of Southsea, both of whom are in a position to submit to us the conclusions at which they have arrived after the deliberate consideration of this subject during a professional life spent in a community the majority of whom are either beginning, or following, or have retired from naval and military life. Let us hope, also, that the universal importance of the subject may induce some of our Continental colleagues, all of whom have had personal experience of military service, to offer us their views on the proper standards of health and fitness.

In striking contrast with Portsmouth and its endless suggestions of strength, effort, activity, the protection of our ceaseless stream of commerce, and the encouragement to the utmost of our national disposition to colonise and civilise every corner of the globe, is the peaceful island that lies on the other side of the Solent. In it there is climate and every proper provision for those who have earned rest, quiet and retirement, after a laborious and adventurous life, for the delicate, for the infirm, and for that unhappily large class of the community with whom we are most concerned, the victims of diseases of the chest, particularly tuberculosis. The Isle of Wight and the coast-region of the south of Hampshire and Dorset, with Netley, Southampton, the New Forest, Milford-on-Sea, Southbourne, Bournemouth, Swanage, and Weymouth, are the types of English winter quarters for the phthisical, vieing in this respect with the health resorts of Devon and Cornwall on the west, and of Sussex and Kent on the east. In this extensive region there have settled many distinguished