

**To the Right Hon. Colonel Stanley, Secretary of State for War.**

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TO THE

RIGHT HON. COLONEL STANLEY,

*SECRETARY OF STATE FOR WAR.*

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SIR,—We, the members of the Board of Examiners of Candidates for the Military Medical Services of the Queen (appointed under the Act 16 & 17 Vict. c. 49) have the honour most respectfully to submit for your consideration the statements set forth in the following pages.

These statements relate to paragraphs 3, 4, 60, 79, 80, 81, 83, 84, 85, 86, and to Appendix A x, page 42, in the "Report of the Committee appointed by the Secretary of State for War, to inquire into the Causes which tend to prevent sufficient eligible Candidates from coming forward for the Army Medical Department."

One copy of this Report having been sent to the Secretary of the Senate of the Army Medical School for the information of the Senate, it was assumed that it was sent to enable the Senate, through the Professors, to consider those parts of the Report which affect the interests of the School, and which concern the education and admission of the candidates through the London examination (these two things being intimately related to each other).

The Director-General of the Army Medical Department, however, as one of the signers of the Report, did not think the Senate could raise any discussion upon it, and suggested "that the Professors should draw up a statement or memorandum for the information of the Secretary of State for War, and send it through him as President of the Senate, and that he should take care personally to draw Colonel Stanley's attention to such a document as deserving his most serious consideration."

The Professors accordingly proceeded to deal with those parts of the Report which concerned the education and admission of candidates into the service, and to state how the proposals would affect the



efficient working of the School. A subsequent letter, however, from the Director-General, stated "that as Colonel Stanley had not signified  
 "any wish to have any expression from the Senate of the School,  
 "as a body, on the recommendations of the Report, he (the Director-  
 "General) does not see that it is quite within their province to  
 "make any in their senatorial capacity, though he makes no  
 "doubt he would be very glad to have their opinions individually  
 "on any points which may seem to them to militate against the  
 "interests of the School of which they are Professors." In answer to a request for more copies of the Report, he authorised three more to be sent, which he considered sufficient.

Under these circumstances the Professors did not think it expedient for them to give separate expression to their individual opinions. But the interests of the Army Medical School are so interwoven with the statements contained in the Report, especially those regarding the education and the examination for admission of candidates into the Army Medical Department by the London examiners, that these must be considered together.

The following remarks would have been superfluous and uncalled for, had the statements respecting the points connected with the School and the examinations, both at London and at Netley, been based upon a correct knowledge of the facts concerning the teaching at the former, and the mode of conducting, scope, and real nature of the latter. But as this knowledge does not appear to have been possessed, nor indeed, as it would seem, even sought for by the Committee, we have thought it desirable to place these facts in their true light, lest from their being misrepresented the efficiency of the Army Medical School, and the character of the examinations, might be endangered.

With this view the Secretary to the Senate (himself one of the Board of Examiners in London) considered it his duty, under the circumstances, to send a copy of the Report to his co-examiners.

After a careful consideration of the paragraphs above enumerated, and which alone concern us, we beg respectfully to place before you the results to which this consideration has led us. The paper is sent in a printed form in order that it may be more easily read and referred to, and also in the hope that if it be thought proper, our explanation may have the same publicity as has been given to the Report of the Committee.



With the general scope of the Report and its recommendations, other than those concerning the examinations, we have nothing to do, and do not presume to offer an opinion regarding them.

The table given at page 3 of Report to the Secretary of State for War includes the competitive examinations for the Army Medical Department during the last ten years.

#### ARMY MEDICAL SERVICE.

	Vacancies.	Candidates.	Qualified.	Appointed as Probationers.	PERCENTAGES.	
					Candidates to Vacancies.	Passes to Candidates.
1868—Summer,	21	37	32	21	176	87
Winter,	...	...	...	...	...	...
1869—Summer,	...	...	...	...	...	...
Winter,	...	...	...	...	...	...
1870—Summer,	...	...	...	...	...	...
Winter,	36	57	53	36	158	93
1871—Summer,	14	34	33	14	242	97
Winter,	12	19	18	12	158	95
1872—Summer,	...	...	...	...	...	...
Winter,	...	...	...	...	...	...
1873—Summer,	18	15	14	10	83	93
Winter,	24	19	18	15	79	95
1874—Summer,	20	23	22	17	115	96
Winter,	24	11	10	8	46	91
1875—Summer,	28	21	21	14	75	100
Winter,	38	...	...	...	...	...
1876—Summer,	50	34	33	33	68	97
Winter,	50	23	17	17	46	74
1877—Summer,	50	31	30	25	62	97
1878—Winter,	40	19	18	18	48	95
	425*	343	319	240	80·7	93·0 *

It shows a mean of 80·7 candidates for 100 vacancies; and if the 12 candidates mentioned in the footnote of page 3 in the Report are included for the winter of 1876, the number is raised to 83·2 candidates competing for 100 vacancies. From this table it has been concluded "that candidates have become progressively scarcer in proportion to vacancies;" and that "the diminished supply

\* The numbers in this line have been calculated out, and are not given in the original table of the Report.



"has necessitated the employment of medical men lower and lower "down the pass list" (p. 4). But the data supplied by the above table suggest and justify other conclusions also.

It may be remarked, for example, that in the three years prior to 1873, the number of candidates was in proportion to the number of vacancies as 177 to 100, or 77 per cent. in excess; whilst in the years including, and subsequent to 1873, the number of candidates in proportion to the number of vacancies fell to that of 59·6 to 100, showing a deficiency of 46·4 per cent. No plainer proof would seem to be required that the cause of such a falling off is to be sought in something which occurred (*e.g.*, the issue of the Warrant of 1873), or to some change that took place in 1873 and the subsequent years. In the three years anterior to 1873, the mean annual number of vacancies was 27·3 and of candidates 39; and in the period including, and subsequent to 1873, the mean annual number of vacancies was 54·5 and of candidates 32·6. Consequently there was a great increase in the number of vacancies, together with a diminution, not very marked, however, in the number of candidates.

There are also some other details in the table (on previous page) of the Army Medical Department, given at page 3 of the Report, which require some explanation. For example, in the summer examination of 1873, why is it that 18 vacancies being open, 10 candidates only were appointed when 14 were qualified? Again, at the winter examination of the same year, when 24 vacancies were open, 15 candidates only were appointed when 18 were qualified. Again, at the summer examination of 1874, when 20 vacancies are declared open, how comes it that only 17 candidates are appointed when 22 were qualified? Again, at the winter examination of 1875, when 24 places are vacant, only 8 candidates were appointed when 10 were qualified. And lastly, at the summer examination of 1875, 28 vacancies are recorded open, but 14 candidates only were taken when 21 were qualified. These circumstances require some explanation, seeing that 114 vacancies have been declared in five consecutive years, for which 85 men qualify, yet 64 only are taken. It is suggested that those candidates who were not taken when they were so much required, although fully qualified, are those who at once declined to take up their appointments, finding at the eleventh hour that the Army



Medical Department was not so attractive as they had expected; that they found themselves at once dissatisfied with their position and prospects, and that they could do better elsewhere.

It is also within our knowledge that first-class men, after being a year in the Army Medical Service, have thrown up their commissions, and again entered for the London examination in competition for the Indian Medical Service, and with success—one of them recently taking the highest place in all the examinations—a great loss to the Army Medical Department, and an equal gain to the Indian service.

In the following paragraph (4) it is stated that “even for the “Indian Medical Service, with higher pay, not more than sufficient “candidates have lately come forward.”

That this statement regarding the Indian Medical Service in

#### INDIAN MEDICAL SERVICE.

	Vacancies.	Candidates.	Qualified.	Appointed.	PERCENTAGES.	
					Candidates to Vacancies.	Passes to Candidates.
1868—Summer,	10	22	15	10	220	68
Winter,	20	38	36	20	190	95
1869—Summer,	40	40	39	39	100	97
Winter,	10	23	23	10	230	100
1870—Summer,	No Ex-	amina-	tion.	...	...	...
Winter,	...	...	...	...	...	...
1871—Summer,	...	...	...	...	...	...
Winter,	40	55	54	40	138	98
1872—Summer,	15	32	32	15	213	100
Winter,	16	27	26	16	169	96
1873—Summer,	11	14	14	11	128	100
Winter,	18	37	37	18	206	100
1874—Summer,	40	28	28	14	200	100
Winter,	20	40	40	20	200	100
1875—Summer,	10	30	30	10	300	100
Winter,	23	44	43	23	191	98
1876—Summer,	13	30	28	13	230	93
Winter,	17	48	46	27	177	96
1877—Summer,	19	28	26	19	147	93
1878—Winter,	25	30	30	25	120	100
	331	566	547	330	170	97



the Report is not in accordance with facts may be seen from the preceding table, which has been drawn up for the same years as those quoted for the Army Medical Service. It shows the experience of the competitive examinations for the Indian Medical Service during the past ten years; and as a mean that 170 candidates have competed for 100 vacancies—*i.e.*, 70 per cent. more candidates than vacancies—a competition quite as good as could be expected, with so much competition and demand for medical men in civil life, the colonies, great steam-ship companies, mercantile marine, and civil appointments, and that with fewer men entering the profession. Returns to be obtained from the numerous medical agency offices might show the extent of this competition. Not only is the statement made in paragraph 4 untrue as a matter of fact, but the table given by your Committee relative to the Army Medical Service, and that which we have given relative to the Indian Medical Service, incontestibly show, from every point of view, that the London examinations have had nothing to do with the scarcity of eligible candidates for the Army Medical Department,—that these examinations have not been deterrent to candidates, either directly or indirectly,—and, that the causes of their scarcity must be sought for in some other source.

The Report itself, and the evidence on which it professes to be based, fully show that service in the Army Medical Department had long ceased to be held worth competing for; whereas service in the Indian Army still continues to be held a prize worthy of competition; and that the examinations have had no deterrent effect in this Medical Service is obvious, since 170 candidates have been available for 100 vacancies any time these past ten years.

Arguments are afterwards attempted to be drawn in the Report to the effect that it is the London examination which “is directly “detrerent to the candidature of some of the most eligible students.” This the reporters say they have in evidence. Of what does this so-called evidence consist?

1. An expression of opinion, unsupported by facts, by the Catholic University of Dublin. We learn that this notoriously expresses the opinion of one man in that University, and does not convey that of the Dublin Schools.

2. Of Edinburgh University, which merely implies that the



candidates have been already sufficiently examined and tested as to professional ability.

3. St. Bartholomew's Hospital, where the writer, while stating an opinion that the "system of examination is calculated to discourage "men well versed in their profession from entering," nevertheless proceeds to suggest a system of examination which he considers better.

4. St. Thomas' Hospital.

5. Westminster Hospital, whence an opinion only is expressed that not a few are deterred by the competitive examinations.

6. Dr. Mortimer Granville, a sub-editor of *The Globe Newspaper*, and a medical man not in practice.

7. Dr. W. Loney.

8. Dr. Moore.

9. Mr. Samson Roch.

The object and scope of the London examination are also very much misrepresented in the Report.

As opposed to the opinions which are expressed in it, we have the honour to submit as an Appendix (No. 1.) to this statement, the opinions elicited in a debate on the subject of medical education in the Medical Council in 1864. The quotations are from the medical journals of that period, when the late Dr. Parkes' able speech commanded the most serious attention. He was able to show by extracts from the examination papers of the candidates the defective knowledge of many gentlemen who had succeeded in procuring diplomas; which extracts displayed defects so profound and vital as to produce a deep impression upon the members of the Council.

It may be objected to the use of this argument that medical education has so much improved during the past ten years, that there is no longer the same need for a competitive examination. But the case, in fact, remains much the same. In the civil schools up to 1868, ten branches of study made up the curriculum for students in the science and practice of Medicine, each of which has attained to proportions which are simply astounding—a bulk which has been increasing more and more as regards each of the sciences for the past twenty-five years. In 1869 the Medical Council recommended that those ten subjects should be extended to fourteen, without increasing the time required to



accomplish the work, the course of study being completed in four years. The result is that teaching by lecturing has greatly increased at all schools, and more is exacted of students at examinations, while time and opportunities for practical work and tuition have greatly diminished. The kind of tuition given, and the succession of subjects taught, are solely intended to prepare students for the general medical practice of civil life; and, moreover, the scope of the subjects taught is no more than sufficient to form a foundation of medical knowledge, the actual art and practice of which have to be acquired as time and opportunities offer *after qualification*. In support of what has been advanced, the discussions that have taken place in the General Medical Council of Education during the past eight or ten years may be referred to in illustration. In the Report of their Committee on Professional Education, while recommending that every student should perform the duty of clerk and dresser [in an hospital], it is reported that "at present in our large schools " there are many students who never have the opportunity of " practical work of this kind, which they may be called on to perform " the day after they have passed the examination."

We beg to refer to Appendix No. 2, which we think, in these respects, still fairly represents the experience of our profession in the matter of their assistants, when fresh from the schools.

The candidates who come forward in competition for the Services cannot be said to have acquired more than a book knowledge of the sciences of Medicine and Surgery, with the exception of those who may have been dressers, clinical assistants, or clerks. In the Army Medical School the candidates really go through an apprenticeship to the special work of the military medical services; and in a military hospital such as Netley, it has been rightly considered that they can best acquire that knowledge which is indispensable for their future usefulness in those services.

The object of the London examination is therefore twofold :

1. To select the best men who come forward, and, secondarily, to exclude those who are unfit.
2. To place those selected in order of merit.

That there is still a necessity for selecting the men is shown in the Report of your Committee by the fact that 7 per cent. of the Army candidates have failed to qualify any time these last ten years.



How, unless by open competition, are such unqualified men to be kept out of the service?

By obtaining extracts from the Minutes of the General Council for Medical Education, your Committee might have learned that since 1864 the percentages of rejections of army candidates from the several licensing bodies (made up from the records of the examiners, and supplied to the Council by the office of the Department) have varied amongst these bodies from 11 to 43·2 per cent., thereby showing the necessity for some kind of selective competitive examination.

The fact is, the objection to the competitive examination is rather on the part of some of the examining and licensing bodies, than on the part of the students who come forward and undergo it. No good student ever dreads a competitive examination if it is fairly and honestly conducted; and the numbers who come up, even as often as three and four times after a first rejection, as several Indian candidates have done (the prize being thought worth fighting for), not only show that these examinations have no such deterrent effect as is alleged by your Committee, but it may also be stated that these rejections have often been regarded as a benefit by the candidates, in making them work up the subjects in which they were deficient. This more thorough study has sometimes carried a candidate from a fifteenth or twentieth place (when few vacancies existed) up to a second or third place in the subsequent, and for him successful, competition. And on many occasions candidates who have thus come up and passed a successful second or even third examination, have expressed gratitude to the Board for the advantages they had derived from having their deficiencies pointed out.

Such records and ample experience show that diplomas and licences to practise in Medicine and Surgery are very far from being sufficient to exclude unfit men from the service; and the practical experience of those who are familiar with such inquiries fully substantiates the admission in paragraph 83 of the Report, that there are considerable differences in the value of diplomas and licences as issued by the twenty-one licensing bodies, who must always necessarily compete with each other.

The examiner in Surgery desires especially to maintain that the examination in Clinical and Operative Surgery is *absolutely* necessary,



as a most important test of the fitness of the candidates for the duties of army surgeons. Very many candidates present themselves for this examination who appear really to have had very little, while some have had no experience in any of the common operations which an army surgeon would be frequently called on to perform in his hospital, or in the more important ones he would have to carry out in the field, and that without much assistance or time for consultation. It is unnecessary to enter into many details of errors committed by candidates. They are still similar to those so well described by the late Dr. Parkes, and by other eminent medical men who have visited the examination, and whose testimony is given in our Appendix No. 1 to this statement. But to satisfy the Secretary of State for War that our description is not overdrawn, the examiner in Surgery thinks it sufficient to state that lately a candidate being required to tie the common carotid artery, after endeavouring a long time to find something to pass his ligature round, got down to the first portion of the subclavian, and tied it instead—an operation few surgeons would attempt on the living subject. Another candidate passed a ligature *through* the external iliac artery instead of around it—a mistake which might end fatally to a living person. Another candidate proposed to cut out the prostate gland when enlarged, to relieve a patient from the effects of retention of urine—an operation which would be simply murder.

When we come to look still further into the history of the competitive examination for the Army Medical Service, we find that the requirements necessary to qualify cannot in any way be considered as unduly exacting—*one-third* only of the maximum number of marks attainable being necessary to qualify. In January, 1860, it was decided by the authorities that the successful candidates of the Army Medical Department should be arranged by the examiners into three classes, after the following scale: namely, that those gaining three-fourths of the marks should appear in the first class; those gaining one-half and above, in the second class; and below one-half in the third class. Nevertheless, it is on record that there had been such a marked falling off in the qualifications of the Army Medical Department candidates, that none could be placed in the first class after January and August, 1860, when on these occasions 3 out of 27, and 3 out of 38 candidates were placed in the first



class. On February 26, 1861, the examiners had to report that they were unable to place any candidate in the first class; after which the proportion of those placed in the second class constantly diminished till 1863, when the deterioration was especially marked; and after that time instructions were given (dated 7th August, 1865), that such classification should cease.

On the other hand, not only does the Indian service obtain a good competition of 170 candidates for 100 vacancies, but the men have been much superior to those of the Army Medical Department—3 per cent. only failing to pass, as against 7 per cent. rejected for the Army service in the past decade.

With regard to the London examination, the mode in which it is misrepresented in the Report can only be explained on the assumption, as we have remarked, that the reporters were wholly unacquainted with its details.

(1.) The examination is misrepresented both as to its nature and scope, as well as with respect to its severity, which has been greatly exaggerated, especially in the statement that a knowledge of minutiae and needless details is required of the candidates, and that it is wanting in practical character. As statements of this kind are calculated to cast some reflection either on the mode in which the examination is conducted, or to indicate disapproval even of its substance, we would beg leave to remark that such charges, if they can be so called, are now made for the first time in this Report, although the examinations have been conducted in precisely the same manner, and with the same scope, for the last twenty-five years.\*

\* The following extract from "Minutes of Meetings of Board of Examiners of Candidates for East India Company's Medical Service, 4th November, 1854," will show the original aim and scope of the London examination. At a meeting held to consider in what way the examination may be best conducted, the following general outline was proposed for approval, and it was subsequently approved of by Sir Charles Wood on the part of the Indian Medical Service, and subsequently by the Army and Naval Medical Departments:—"We think the examination should occupy a week, and should be divided into three parts, the qualifications of the candidates being respectively tested by a written, a *vivâ voce* examination, and by a practical examination of patients. Thus, on Mondays and Tuesdays we propose to have a written examination, lasting each day for six hours—the subjects on Monday being *Medicine* and *Surgery*; and on Tuesday, *Anatomy* and *Physiology*, *Botany* and *Natural History*. On Wednesday and Thursday there would be a *vivâ voce* examina-



During that long period, however, so far from having met with any expression of disapproval, the substance and mode of conducting the examinations has invariably, as we have been led to believe, met with the entire approval of all the successive heads of the various medical departments, who have made a practice of honouring them on frequent occasions with their presence. We regret that the present Director-General has not deemed it necessary to visit the examination whilst going on; and we are fain to believe that had he done so, the implied objections to it contained in the present Report would scarcely have been made.\*

tion on the same subjects in the same order, at which the candidates will also be called upon to describe and explain *anatomical, pathological, and botanical preparations*. On Friday and Saturday there would be a *practical examination of patients*, so that the candidate's acquaintance with and power of distinguishing diseases, may be tested. *This part of the examination appears to us to be of great importance. We propose that after examining a patient for a specified time, the candidate shall be called on to write down the result of his examination, his opinion of the nature of the case, and the plan of treatment he would propose.* In this way, although each candidate will not be able to examine more than two patients, the examiners believe that they will be able to distinguish with considerable certainty the relative practical merits of the competitors.

"In coming to a conclusion as to the respective merits of the candidates, the degree of excellence shown in all the subjects of examination will be considered, though we think the greatest value should be assigned to proficiency in the subjects which bear most directly on the future duties of candidates as practitioners in Surgery and Medicine; but should any one prove himself particularly well acquainted with Natural History or Physiological Science, it will perhaps be well to give some preference to him, provided his knowledge in Medicine and Surgery be also considerable."

\* The late Director-General, Sir Galbraith Logan, was in the constant habit of attending when the candidates were operating; and such has been the rule of the Director-General of the Naval Medical Service, or one of his deputies; and of Sir Joseph Fayrer on behalf of the Indian Medical Service. But since the retirement of Sir Galbraith Logan, no one from the Army Medical Department has been deputed to inspect or report on the manner in which candidates have operated or been tested in clinical work. Not one member of your Committee ever attended to witness how the practical work of the examination was carried out; and yet they venture to criticise its character and effects upon the service. Besides, that the visitation of the examinations was a duty agreed upon by the Army Medical Department may be seen from the following extract from the Minutes of the Board:—On the 29th July, 1858, in reply to inquiries respecting the "conditions and arrangements which the examiners would suggest for the examination of candidates for the Medical Department of the British Army," the Board of Examiners submitted the same plan as had been carried out by them for the Indian Medical Service; and amongst other conditions it is mentioned—(4.) "That the examinations, or any parts of them,



(2.) The printed questions for the examinations speak for themselves to those who understand how such examinations require to be conducted, having in view the objects they are designed to secure. And as for anatomical details being insignificant and needless,\* we have yet to learn that an army surgeon, or any other surgeon, can dispense with a fair practical knowledge of the bones, muscles, and ligaments of the body (and *a fortiori* of the arteries and veins), which is all that the examiner in Anatomy desires to find out by the questions he puts.

As regards the necessity for some examination, even in the mere rudiments of Anatomy, it may be stated that occasionally duly diplomatised candidates have presented themselves ignorant even of the names of some of the bones, and unable to distinguish one clavicle from the other, or even the radius from the ulna. (See Appendix I.)

The allegation with regard to a knowledge of minute details in Botany is simply absurd; even if this were the practice no such argument could be drawn from it, as the whole of the examination in Zoology, Botany, and Physics is, like that in languages, entirely optional; and it might as well be made an objection to the examinations, that the candidates were required to show a profound knowledge of Hindustani, German, or of French.

The examination in Natural History and Physics has ceased to be a compulsory part of the examination since 1864, when including the arrangement of the names of the successful candidates in order of merit, or on any other plan that may be desired, should be attended by the Director-General, or some one appointed by him."

\* The proposal that an examination into the comparative qualifications of candidates for the public medical services need not include Anatomy and Physiology, is one of such an extraordinary nature as to be beyond the reach of discussion. It is therefore very surprising to find under the authority of "St. Bartholomew's Hospital" (whatever or whoever that may mean), a staggering remark implying that Anatomy and Physiology are only to be regarded in the nature of scientific training, and that the "knowledge of details in these subjects is not required for the efficient discharge of professional duties." The danger of such a doctrine coming from one of our leading schools, though, it is to be hoped, confined to it, is too obvious to require comment. We can only hope that the system of instruction there given in the essential foundation of all medical and surgical science and practice is not based upon the assumption that all the details of Anatomy and Physiology may be forgotten as soon as they have served the purpose of passing the primary examination for a diploma. That such a doctrine should really be held in a foremost medical school would be, it must be confessed, a fearful portent of the ignorance that may be encouraged in other places.



it was made optional, and a compulsory *practical* examination as to the candidate's knowledge of *drugs* was substituted in its place. It is therefore obviously unfair to mix up two subjects one of which is compulsory and the other optional, and draw an argument from such a combination as to the severity of the examination in minute details.

Moreover, the history of the optional examination in Natural History and Physics since it ceased to be compulsory and became permissive, furnishes a very strong argument against the theory that any deterrent influence can be exercised by it upon candidates, since as many as 85 per cent. of the candidates have volunteered to undergo such examination. It is also a significant fact, that these volunteers have been comparatively few from the Army Medical Service candidates, and that the greater number have always been furnished from those for the Indian service. This part of the examination—the voluntary one in Natural History and Physics—has always been regarded by the examiners as not a bad test and indication of the general education and accomplishments of the men.\* Those who have been at the top of the list in these subjects have almost without exception been so in other subjects also; and in all the examinations during the past ten years, there is no instance of a man well acquainted with them being rejected for ignorance in other subjects. With regard to the practical examination in *Materia Medica*, meaning an acquaintance with common drugs, which is now compulsory, it was instituted and authorised in compliance with an opinion expressed by the Senate of the Army Medical School, that some of the candidates sent to Netley had shown dangerous ignorance on this important subject, and that a compulsory examination in drugs had become a necessary measure, to secure a sufficient knowledge of them amongst medical candidates for the services.

As to the scope of the examinations in the written part, the endeavour of the examiners has been to test not only the professional

\* In the *History of the English People* this is an experience of more than 600 years. "The neglect of the study of Physical Sciences for nearly thirty or forty years," pleads Roger Bacon passionately, "hath nearly destroyed the entire studies of Latin Christendom. For he who knows not physical science cannot know any other sciences; and, what is more, he cannot discern his own ignorance or find its proper remedies." Green's *History of English People*, p 263, Vol. I.



acquirements in the science and practice of Medicine and Surgery, but also to test the mental powers and resources of the competitors; while the diversified Clinical and Surgical cases submitted to them for their own practical investigation have never failed to show how far the principles and practice of the science of Medicine and Surgery are thoroughly understood.

To do justice to all candidates, the examinations have always been intentionally devised so as to embrace a wide range of questions in all the subjects.

(3.) The Report of your Committee is made to convey the impression that the London examination is deficient in not being of a *practical* character.

As a matter of fact, every candidate in an examination, which lasts for twelve hours for each man, is subjected to a practical examination extending over three and a half hours out of the twelve.

The implied allegation that the examination is not practical, is in direct opposition to the fact; and, as will be seen on reference to footnote, page 11, it is in opposition to the original scheme, in which the practical part of the examination was a most prominent feature, and considered by the examiners to be *the most important part of the examination*. They are still of that opinion; and, with the exception of the written questions, it continues to be almost entirely practical—both in the Medical, Surgical, Anatomical, and Materia Medica parts—so far as possible. Of this, as we have before observed, the Director-General might easily have satisfied himself had he taken the pains to visit the examinations; and the Committee would have avoided falling into a gross misstatement had it taken the simple, obvious, and, it may be added, courteous course of asking for information from the examiners themselves.

The scope and practical nature of the examination were well described by the late Dr. Parkes (see Appendix I. to this statement). It continues to be the same in character still; and can neither be considered as too perplexing nor too minute; but, it certainly aims at finding out what a man has retained of those subjects which are essential to the knowledge necessary for a *safe* practitioner in the medical services of the Queen.

(4.) We would desire to add a brief remark on the statement



contained in paragraph 86 of the Report, that the examination is in reality nothing beyond a "Pass," as "the candidates rarely equal the vacancies." Merely noticing that, in our opinion, the paucity of candidates for the Army Medical Service is not in the remotest degree connected with the competitive examination to which they are subjected, but to entirely distinct and manifest causes with which we have nothing to do, we would observe that it is quite a mistake to regard the London examination simply as a "pass." It is equally competitive whether the number of candidates be large or small, or whether it is equal to that of the vacancies or not. In a pass examination, it is needless to say, the candidates are not necessarily placed in order of merit, as they are in our examination. And the struggle for places in this order will be precisely the same amongst the candidates be they fifty or only two, and the better man or men would, or rather should, in any case appear in their proper places and obtain the advantages, if any, to which they may become entitled according to the place they hold. Again, the number of candidates makes no difference in the value of the examination in its secondary, though perhaps really most valuable aspect, or rather effect—viz., the elimination of candidates who may prove themselves wholly unfit for the service under any circumstances, and with whatever qualifications. Such persons are quite as liable to be rejected whatever the number of candidates may be.

To what extent the examination is a pass examination has been already shown.

The question of the advisability of selecting candidates for employment in the public service by open competition having apparently been long settled, we are not called upon here to consider it; and would merely remark that whatever advantages it may be thought to possess over selection by patronage, appertain to it as strongly in the medical as in any other branch of the public service. But besides this, as we have already observed, the London examination has the secondary very beneficial effect of occasionally keeping out of the service persons wholly incompetent, notwithstanding their possession of the needful diplomas. To whatever cause it may be due, our experience of many years has shown incontestibly that men ignorant of the merest rudiments of medical and surgical



knowledge, either theoretical or practical, do find their way somehow upon the register.

Candidates are often still unable to perform the most ordinary and necessary operations, such as the taking up of blood-vessels, division of tendons, and other operations of the same kind. Many are found wholly unacquainted with the application of bandages and splints, and would be quite at sea if called upon to treat many of the most ordinary casualties as they ought to be treated.

All this shows how absolutely necessary it is that some means should exist of testing, beyond the mere possession of a diploma, the qualifications of those to whom in an emergency the lives and limbs of Her Majesty's forces are entrusted. We much fear that the strange scheme proposed by your Committee, of taking men upon the recommendation of the teachers of different schools, will not work with any advantage to the public service, for reasons almost too obvious to notice. Such a selection in the schools themselves (unless it be made a mere matter of favouritism) must (one would suppose) be made by some sort of competition. Whether such competition conducted by the teachers, whose reputation in some measure would depend on the results, is likely to be as open and searching as in the hands of an independent body, needs but little discussion.

Certain it is that the abolition of competitive examination would withdraw an important guarantee for efficiency, which the Department cannot afford to part with.

If the Army Medical Department can hold out sufficient inducements to the medical youth of the country, that in it an honourable social position and a comfortable independence for life is open to them, there will be no difficulty in securing a sufficient number of candidates to compete for the vacancies. Success in such examinations would always be regarded as an honourable distinction; and a desire of gaining public reputation, by being placed high in such a list of competitors, cannot fail to excite a degree of emulation and of industry which could not but be of advantage to the public service.

The ultimate object of the examinations at London and at Netley, in their combined results, has hitherto been to place the men in a carefully tested order of merit, so that the place of each candidate is finally determined by the sum-total of the number of marks he has



gained at both examinations. Thus they have taken rank in the service according to their places in the *final* examination, and a salutary emulation has been sustained up to the last moment. The precedence which has thus been given to merit has not been merely honorary, but as the best men know, such precedence has been attended by very solid advantages—since it is in the order of such seniority that they have succeeded to promotion in the service. Hitherto the candidates have commenced at Netley Hospital and School a life-long competition, in which the man who continued to educate himself the best was sure to come to the front.

All such classification from competitive work will be abolished, if some of the recommendations of your Committee are carried out.

The tone of the Report, from paragraphs 79 to 86 inclusive, cannot, in the experience of competent authorities, be such as is calculated to raise the professional tone of the Army Medical Department; more especially when the head of the Department, as the only professional member of your Committee, lends the powerful influence of his high position to undervalue the necessity of a knowledge of anything beyond the most ordinary professional acquirements—when the most important subjects are spoken of as “insignificant details,” and when the Committee cannot see that there is any recondite knowledge necessary for a military surgeon which is not requisite for a civilian, which no one, so far as we know, demands.

Then, with regard to a course of instruction at Netley, a mere certificate of due attention, with a pass examination in such subjects only as are essentially peculiar to army work, is all that the Committee considers should be required of the candidate. This gives no inducement to competition amongst the candidates—no security that they will do any work at Netley more than they are obliged to do—and no sufficient tests by which they can ever be arranged in a final order of merit; nor qualify them for competition for those prizes in the School, such as the Herbert Prize, the Martin and the Parkes' Memorial Medals, which do not seem to be of any consequence in the eyes of the Army Medical Department. Thus the efficiency of the Army Medical School will be obviously greatly impaired, if some of the recommendations of your Committee are carried into effect.

When viewed in contrast with the now ever-improving attain-



ments of the military officer, both at home and abroad, who aims at combining "the truly military with the truly scientific acquirements—the finest type of civilised man"—the policy of the Army Medical Department, as disclosed in the Report of your Committee, is not calculated to secure either the respect or confidence of the public, whether laymen or professional.

#### GENERAL SUMMARY.

In conclusion, we would briefly summarise the substance of what we are desirous of saying with reference to the recommendation of your Committee, as contained in paragraphs 79 to 86.

*First.*—Paragraph 79. (1.) Whilst fully agreeing with the Committee that the London competitive examinations answer two good ends, we differ from it in the definition of these ends. (2.) We deny that the examinations do or are intended to search into the most minute details of Medicine, Surgery, and Physiology. (3.) We fail to find in the Report anything worth calling evidence as to the deterrent effect of the examinations to the candidature of the most eligible students; and we do not agree that competition has ceased on account of the paucity of entries, but, on the contrary, that it is as active with a small as with a larger number; and, moreover, notice that the paucity of entries has relation only to the Army Medical Department, and to the Naval Service, for reasons wholly irrespective of the examination.

*Second.*—Paragraph 80. We have shown that candidates are not subjected to a searching examination into the minutiae of every bone, muscle, ligament, and into every division of the Botanical classification, and that the latter supposition is altogether absurd; whilst at the same time the candidate has abundant opportunity of displaying any knowledge he may possess in the higher branches of practical Surgery and Medicine, in which we include Anatomy and Physiology.

*Third.*—Paragraph 81. We have pointed out, what indeed the Committee do not deny, that the mere possession of a diploma is not in all cases a sufficient test of competency to enter a service in which the lives and limbs of her Majesty's soldiers and sailors are *compulsorily* placed in the so-called surgeon's hands.



*Fourth.*—Paragraph 82. There is no reason to believe that there is the slightest foundation for the curious, if not preposterous, notion put forth in this paragraph.

*Fifth.*—Paragraph 83. This paragraph appears simply to contradict those that precede. It is acknowledged, however, by the Committee, that diplomas differ in value; and it is again admitted that a competitive examination is beneficial—in both of which opinions we fully concur. But not so with regard to the recommendation that there should be two different modes of admission—on equal terms, we presume—into the service; an arrangement which appears to us in the highest degree injudicious and impracticable. We would also remark that students are not registered under the Act, except when they commence their professional education. The recommendation as it stands, is simply unintelligible, and, as it seems to us, wholly unworkable. With reference to the proposal of taking candidates upon the recommendation or selection of their teachers, we would direct attention to the pregnant remarks in Dr. Parkes' speech. (Appendix, p. 25.)

*Sixth.*—Paragraph 84. With respect to the recommendation contained in this paragraph, we would suggest that it should be extended to all vacancies. And we would also remark that the examinations, instead of being deficient in practical character, cannot well be made more practical than they always have been and still are; and in addition, that it is precisely in the so-termed *practical* portions of it that the most lamentable deficiencies are manifested.

*Seventh.*—Paragraph 85. Concerns more particularly the School at Netley, in which we are of opinion that the competitive system should be above all things adhered to.

*Eighth.*—Paragraph 86. To the contents of this strange paragraph we have already adverted, and will again here merely express the opinion that the "advantages of public competition" can never be secured by private examinations in the "schools," which are merely used as a means of instruction, and have (except in the few cases where examinations for prizes may be held) no competitive character whatever, nor ever could have, as between one school and another. For who is to tell whether the best man out of three or four hundred students at a large metropolitan school is better or worse than the best man out of a class of ten or twenty at a



small provincial or colonial establishment? The thing is glaringly impossible.

With respect to the assertion that the present examination, owing to the paucity of candidates, is nothing beyond a pass, we have endeavoured to show that whatever the number, it is still in every sense of the word "competitive," and just as useful, not to say indispensable, in any case.

We have the honour to be,

SIR,

Your obedient Servants,

WILLIAM AITKEN, M.D., F.R.S.,

*Examiner in Medicine,*

GEORGE I. ALLMAN, M.D., F.R.S., LL.D.,

*Examiner in Natural History and Physics,*

GEORGE BUSK, Esq., F.R.S., F.R.C.S.,

*Examiner in Anatomy and Physiology,*

GEORGE POLLOCK, Esq., F.R.C.S.,

*Examiner in Surgery.*

LONDON, 15th Nov., 1878.



## APPENDIX I.

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Extracts of opinions expressed by Members of the General Council of Medical Education and Registration, in a debate on the subject of the London Examination of Candidates for the Medical Services of the Queen, in May, 1864, as reported in the *Lancet* and *British Medical Journal* of that time.

The names are those of men the most eminent in the medical profession.

Dr. PARKES,—I am very happy that Dr. Christison has given me the opportunity of explaining to him and the other members of the Council some of the reasons why it appears necessary that there should be an entrance examination of gentlemen about to enter the Army Medical Service; and I believe this matter will be found to be most intimately connected with medical education, and, therefore, in explaining it I shall not be at all out of order, nor infringe on the business before the Council. I wish it to be clearly understood, that in the remarks I am about to make I am in no way referring to those gentlemen who have passed the examination for the Indian service and for the Army, and are now serving in various parts of the world; but I must say this, that in every examination we have had in the Indian service and the Army, during the ten years I have been examiner, and during which time very nearly 800 candidates have come before the Examining Board, there have presented themselves, on every examination, a number of men so imperfectly prepared in the practical parts of their profession, that we found we could not conscientiously admit them into the ranks of the service. I am aware, Sir, that this may seem a strange assertion to the members of the Council, particularly when we consider that every one of those gentlemen brought forward the double qualification; but, by the permission of the Director-General, I have brought down some documentary evidence that will be satisfactory, I believe, to every member of this Council. How, Sir, can we pass a man into the service who knows so little of anatomy as this, that he does not know the radius from the ulna, the os calcis from the astragalus,—that he believes the œsophagus is in front of the arch of the aorta, and that the aorta may rise from the right ventricle? How, in surgery, can we pass a man who gives such answers as these? I will pass the answers to Mr. Syme.

The PRESIDENT (Dr. BURROWS),—Would you be quite right in handing those papers about? Are they not written in confidence?



Dr. PARKES,—I have scratched out the names of the gentlemen, the names of the colleges, and of the places from which they came.

The PRESIDENT,—The Council will never doubt your word; that will be quite sufficient.

Dr. PARKES,—I shall be very sorry if the Council do not see these papers, because I believe they would be perfectly satisfactory to them. At the same time I will go on with a few instances. In surgery, Sir, I do not think Mr. Syme would allow us to take a man into the army who gave an answer of this kind,—who, when asked what he would do for a partly divided, or completely divided, artery, replied, and in writing too, not in the hurry of oral examination, that he would immediately amputate the limb above the injury? I do not think Mr. Syme would approve of a man who, when asked how he would treat an incised wound of the knee-joint, after suggesting various remedies, replied, that if the inflammation still went on he would make large incisions into the joint. I do not think any one would wish to pass a man who, when he was asked, “What would you do if, after delivery, a woman had her breasts unpleasantly full of milk?” would answer, “I would pass a trocar into the breast.” Then, in examination upon medicine, I cannot pass a man who cannot diagnose a single case of phthisis; or who, when he is taken to the bedside, and there is a board at the head of the bed with the name of the disease upon it, “aneurism of the aorta,” with bulging pulsation, shrill and loud murmur, who knows it is a case of aneurism of the aorta, who takes twenty minutes to examine the case, and half an hour to write down what he can tell about it, and cannot put down a single symptom or sign of aneurism of the aorta; nor can I pass a man conscientiously, as a man well up in the practice of medicine—a man who has been two years at a London school of medicine and one year at a Scotch school—who tells me that all that time he has never once heard that the term “scabies” is applied to a disease called the itch. Then, Sir, to cite some few more instances in what we call natural history (and here I should have liked to have passed these papers to Dr. Christison. I will not do so; but I know that on these points he will feel particularly interested, for I know that for years Dr. Christison has in his lectures most properly called attention to the subject; and I must say the Edinburgh men have always given correct answers on these points, and in consequence have directed particular attention to the article of diet. And I am sure there can be no more important subject for the study of the medical student than digestion and diet, in these days when every man in the country is talking about diet and knows a great deal upon the subject):—here is an answer given by an Englishman—not a Scotchman—a man at a first-rate London school—a man who had passed his examinations as a surgeon and apothecary. The question is this—“Mention the principal heads under which alimentary substances may be arranged, and give one or two instances of each.” Nothing can be more simple: it is a question that is put in class examination. I will read the answer of this gentleman, who, I need not say, did



not pass into the army:—"The division is into the nitrogenous and non-nitrogenous aliments: these may be subdivided into albuminous, fibrous, caseous, and gaseous. An example of the nitrogenous is, all vegetables; of the non-nitrogenous, all meats, including carnivora,"—carnivora being wrongly spelt. "Of the subdivision albuminous, perhaps the most common example is the hen's egg; of the fibrous, the meat of the ox or sheep. Veal and pork, I believe, do not contain so much fibrin. Of the caseous, milk and cheese; of the gaseous, soda-water." I will not pursue these examples, but I have plenty of them here; and I can assure you that if we had kept all the documents—which we have not done—I could cover half the table with extraordinary answers. And I beg the Council to believe that I am not exaggerating; I am really only citing instances which occur at every examination. Dr. Stokes said very justly yesterday, that the object of examination is to determine what a man knows, and what he does not know. Now I have found not the least difficulty in ascertaining what he does not know, but it surpasses the skill of Dr. Stokes and myself to discover sometimes what he does know; and the only words in which I can sum up the whole subject are the emphatic words of my colleague, Mr. Paget, in one of these memoranda on oral examination, when, after endeavouring for a long time—and an extremely weary work it is—to get something out of a man, to ascertain whether he knows anything at all about his profession, he was obliged to sum up the whole result of his examination in these emphatic words: "Dull all over." And that, Sir, is the character of this class of men. I wish again to repeat, that I am not referring to the men who *have* passed into the service,—many of whom have passed most creditable examinations,—but men whom I hope we never shall see admitted into the public service. But I come to this point,—and I hope the Council will trust me when I affirm it as a matter of most perfect truth, and if I were permitted to show these papers I could convince every one sitting at this table, that the Medical Corporations are admitting a number of men into the profession who cannot practise their calling with safety to their patients. Dr. Stokes also remarked yesterday, and very justly, that the object of the examination is, not to determine whether a student shall be on a level with the examiner, but to determine whether a man can be safely let out into the world. The object of the examination is not fulfilled; and I mean to say there is hardly any of the great medical corporations that has not sinned in this matter. And now, Sir, I bring the point to this issue. As long as the medical corporations allow men to pass into the profession who cannot be allowed, without danger to the lives of the patients, to treat the persons who come to them for advice, so long must the Army Medical Department institute an examination for itself. It must protect itself. And I do entreat this Council not to urge upon the Government, by suppressing that examination, a course which the Government cannot attend to, or, if it does attend to, can do so only upon the chance of lessening the welfare, diminishing the health, and even imperilling the life of the soldier. And



here I may allude to an argument brought forward by my colleague, Dr. Maclean. In the Civil Service, when a man goes into practice, there is a great check upon him. The civilian can employ whom he likes. A practitioner has to pass through a dreary time of waiting, which perhaps improves his knowledge, or tests his capacity. He is subjected also to the supervision of his professional brethren. But in the army it is quite otherwise. You select a set of men, and give them absolute control over the health of soldiers. Soldiers are compelled to go to a particular medical officer. Will you, then, run the risk of diminishing in any way for the soldier the guarantee that the medical officer who is put in charge of him is a competent person? I believe, Sir, it is impossible that this Council can come to any other conclusion than that the Army Medical Department must enforce its medical examination. But let me pass on to another point. I can conceive that Dr. Christison will say this—"However much it may be desirable to institute an entrance examination for men who have already passed examinations at colleges, still this examination must be in practical subjects. It must be in subjects which will test their powers as practitioners." And on this point I may say that I in a great measure agree with Dr. Christison. But then, you understand, this is an objection to the details of the examination for entrance into the service, not the principle of the examination itself; and I am quite certain that if Dr. Christison or Mr. Syme, or any member of this Council, could make any suggestions as to the details of the examination for entrance into the army, I can answer for it that the Director-General and the Secretary of State would give the greatest possible attention to them. But let me refer to the kind of examination we have instituted, and in doing so I must diverge for a moment to bring before you some points connected with the Army Medical Service. Let me ask the Council this—How is the army to be officered with medical men? There seem to be only three ways. First of all, a certain number of men may be nominated—that is to say, we may return to the old system of patronage. Now, is the Council prepared to recommend a return to that system, in which a man is brought into the medical service of the army, perhaps, to oblige a lord, or subserve parliamentary interest, or gratify private friendship, or it may be even to propitiate a court milliner? And I think I can refer to a member of the Council, who knows that in saying this I am not speaking beyond bounds. Are we to return to such a system as that? And even if we do return to that system, the army must still retain its entrance examination. But I do not believe for a moment that the Council will recommend a return to that system; and if it does recommend a return to that system, I do not believe the recommendation will be responded to by the profession at large. A number of appointments may be given to various colleges and universities, and you may say, "Select your men, and send us up good men." That plan is one that has been carefully considered; it is one that requires the greatest possible supervision. In many respects it is one which it is extremely difficult to work out. Can we be sure that these



colleges will do their duty? Can we be sure that, doing their duty now, they will do it ten years hence? Can you be sure that private interest will not operate? Even then an entrance examination must be required, in order to check the men that come up from the various colleges. Seeing, then, that the various licensing bodies have passed men into the profession that never ought to be in the profession, can we be justified in supposing that they will always choose men who are fit for the service? Therefore that system is not a good one. Then we come to the system at present in force—the system of open competition, in which every man, no matter what his country, no matter what his religion, no matter what his degree, so long as he has a legal qualification for the practice of Medicine and Surgery in the United Kingdom, is admitted to serve his country, if he can prove that he is a better man than those who come up also to serve their country; and I believe that is the system which is considered by the Council and the profession at large as the proper system; and I hope no resolution will pass the Council to-day that will have the effect of diminishing the confidence of the Government in that system. But this I will say, that I hope this Council will not separate without, I will not say a recommendation, but an order, to the various licensing bodies, to see that they do not pass men into the profession who are not capable of practising it; and an indication that they will take immediate steps to see that the licensing bodies do their duty in this particular. I will now, Sir, pass on for a moment to the details of our examination. Our examination consists of these four parts, the details of which can be altered at any time. It consists of an examination in Natural History, in Anatomy and Physiology, in Medicine, and in Surgery; and, in mentioning the details of this system, I must just advert for a moment to the time this system was commenced. It was just ten years ago, in the time of the old East India Company; and it was the fact of its being an East India Company that determined that a Natural History examination should be instituted. And for this reason. There are in India a number of appointments in which a knowledge of Natural History is required, such as the curatorship of gardens, the curatorship of forests, and travelling naturalist expeditions. All these were filled by medical men. Now, however, I am sorry to say, the medical service does not appear to be able to furnish the men who are capable of filling some of these appointments. The Indian Company said, “We will institute an examination in Natural History, for these reasons—first, because the examiners will be able to point out to us the men capable of filling these posts,” &c.; and it might be supposed that the Indian Company, placing into competition such admirable appointments—and, in spite of what has been said about that service, I mean to say there is no service in the world like the Indian Service—would consider that these men would be led to study Natural History for the sake of getting these valuable appointments. I may mention another reason. There have been, as we know, great botanists and geologists in India;



but it cannot be denied that during the century we have held India the medical profession at large has not communicated that amount of information to our knowledge of Natural History that might have been expected from it; and the Indian Company were extremely anxious to cultivate among their medical officers a knowledge of this subject; therefore they wished to devise means for increasing the knowledge of Natural History, and they felt that, as it is a great guarantee for general professional knowledge as well as general intelligence that a man should be acquainted with some other sciences besides those which strictly belong to his profession, it would be a good thing to see, if possible, that the men entering their service made the study of Natural History form part of their general training. These are the reasons why the examinations were instituted; and when the army medical officers were ordered to be placed under separate examiners, it seemed to Lord Herbert desirable that the plan should be continued. For some years, however, there has been really no examination in Natural History. Dr. Hooker, after trying to work this examination as well as possible, and for the first few years sending out men who were perfectly capable of fulfilling some of the duties to which I have referred, found gradually, and especially during the last few years, when such constant attacks were made on this part of the examination, that it was absolutely necessary to drop the special examination in Natural History; and if the members of the Council will take the trouble of looking over the questions (I will tear off the answers), they will find that Dr. Hooker's examination has been an examination in *Materia Medica* and Botany, and those sciences which are not only applicable to medicine, but which any really educated man is expected to know. But there has been really no examination in Natural History for many years; and this I will say, and I wish to be clearly understood by the members of the Council, that no man has been rejected for Natural History in that examination; that in no single instance has a good physician and surgeon, provided there are vacancies, not passed into the service. It is very common, I know, for the men to say, "I was rejected for Natural History," just as in the University of London, when a man is rejected for his education, he says he was rejected for logic and moral philosophy; but I do not know a single case in which a man has not passed merely on his pure professional merits. Examinations were ordered in Anatomy and Physiology. You will find it is the anatomy of the surgeon and physician, not the anatomy of the schools, in which the candidates should be prepared to pass an examination. The questions in Anatomy are such that Mr. Syme would find no difficulty in at once passing upon, because he is dealing with them constantly. I assure you that if you look through the questions in Anatomy and Physiology you will find that they deal entirely with those departments of Anatomy which refer especially to medical and surgical practice. So, again, with the physiological branch. You will find that the questions have an immediate bearing on medical and surgical practice. I do not deny that a question



of high Physiology may not be introduced, in order to give the best men an opportunity of showing themselves. If we did not put in some questions which are necessary in order to distinguish between the best men, how should we find them out? With regard to Medicine and Surgery, therefore, I will only say this: we were directed in the first instance by the authorities to make the examinations as practical as possible, and we have done so. In our written examinations we have made the questions, as far as possible, practical; and in looking over Mr. Paget's questions and mine, I think you will see that this has always been borne in mind. Never in Surgery has Mr. Paget asked a question which can be said to pass into the transcendentalism of education. Then, Sir, we instituted practical examinations, in accordance with the wishes of the authorities, and very high encomiums indeed have been passed on the practical examinations. I have thought much over the subject since it has been under the consideration of certain members of the Council, and I do not, after considering the subject in all its bearings, see how we can improve, in practical points, the examination in Medicine and Surgery. At the same time I would remark that I am sure I can answer for the examiners in Medicine and Surgery, that they will pay the greatest attention to any suggestions that can be made. So much, then, for the details of the examinations, and so much, generally, for the subject of the Army Medical Department, in which I hope I have shown—First, that there must be an entrance examination; secondly, that the present system of competitive examination is the best, and possibly the only one that can be adopted. Having said thus much, Sir, allow me to say a few words upon the larger question of medical education—a question which I view by the light of very considerable experience in medical examination, and very considerable experience in tuition, both in the case of students in the course of their studies, and in the case of gentlemen when they have passed through their course of studies; and I cannot say that I agree with what has been said here—that the present system of medical education is satisfactory. In Chemistry, for example, only to cite an instance, I cannot think the present system satisfactory, when I find that in India there is a constant failure of justice, because within hundreds of miles there is no man to be found who can make a simple chemical examination in a case of poisoning; when I find that for years in that country the army at various stations have been drinking impure water, because no man could be found who could apply a simple chemical test to ascertain that impurity. I cannot think the examination in Anatomy is satisfactory when I find that many men come up for our examination who are extremely deficient in some of the rudimentary points, such as the knowledge of the formation of a skeleton—that very important point without which no man can be a good physician or surgeon. I can appeal to my colleague, Mr. Busk, that there is a remarkable ignorance on the part of men who present themselves—men who in many respects are very well educated. I cannot conceive the teaching in Medicine and Surgery



satisfactory when I see such results as these—that men not only cannot very frequently, as I know is the case, write an intelligible report of a case, but cannot put up a fractured limb, and cannot perform such an operation as passing a catheter without danger to the person operated upon, and this even in the case of men who are well educated, and who will be eventually extremely useful practitioners. I cannot conceive, then, that the state of medical education is satisfactory. And the question is—not to occupy the Council too long—how this Council may deal with what I consider a very unsatisfactory state of things. And I believe the Council can deal with it in this way, and in this way only. They must deal first with the examinations. They must see that these are such as they should be. I do not demand a high standard of examination. I do not demand anything more than that in the examinations it shall be seen that a man is not dangerous; if possible, that he should be gifted with such knowledge that will enable him to do good to the patients he is called upon to treat.

Dr. SHARPEY could confirm what Dr. Parkes had said as to the extreme insufficiency in point of practical skill of some of the candidates who present themselves for examination for the Army Medical Service. Some years ago, Mr. Paget and Mr. Busk had invited him to be present at the examination in Operative Surgery. Many of the candidates performed the operations rightly; but one, being required to cut down and tie the subclavian artery, raised instead the omo-hyoid muscle; another, to tie the iliac artery, cut through everything—skin, muscle, and peritoneum, and, in stitching up the wound, left portions of omentum protruding through it.

Mr. ARNOTT had listened carefully to the speech of Dr. Parkes, whom he was glad to see in the Council. He was aware, when the army examinations were going on, that men having licences from the different corporate bodies and universities had been rejected. He had obtained from the army board a list of the rejected candidates; and these were furnished from all the licensing bodies, except Oxford and Cambridge; not from any one in particular. In his opinion, Dr. Parkes was quite justified in supporting the necessity of a second examination for the Army Medical Service. Having been engaged in teaching during thirty years, he was perfectly satisfied that the essential defect of the present candidates was not ignorance of doctrine, but a want of practical knowledge of their profession. He was present at an examination at University College in Surgery. One man was asked to put a splint on the arm: he did not know the difference between the splint for the arm and the splint for the leg; and when he came to apply it, he did not know whether it was for the front or the back of the arm.

Dr. FLEMING,—With respect to the double examination, the eloquent address of Dr. Parkes must convince them of the necessity of a special examination for the army at least. It might be that inferior candidates had gone up; but whether it were so or not, the fact that all these gentle-



men had previously passed the examination of two boards showed that the system at present in force did not answer the end in view.

Dr. CHRISTISON,—What the Council had heard from Dr. Parkes showed that an examination in practical knowledge is required.

The PRESIDENT (Dr. Burrows), said he must advert to the statements made by Dr. Parkes, to which they had all listened with a certain degree of pain and a certain degree of amusement. Dr. Parkes had thoroughly vindicated the Army Medical Board as to the absolute necessity of an entrance examination into the public service. When they looked at the responsibility of the army surgeon, with the lives of 800 or 1,000 men committed to his care, without the possibility of calling in a friend or colleague to assist him, it was of the utmost importance that he should be well versed in the practical subjects of his profession. But while admitting the necessity for such an examination, he must, on the part of medical students, and on the part of those who had passed the various licensing boards, vindicate them from the opprobrium of supposing that the individuals mentioned by Dr. Parkes were specimens of the average attainments of candidates.

Dr. PARKES said he quite agreed with the President in that respect, and he was exceedingly glad that attention had been called to the subject. He had simply stated the fact that certain men did present themselves, and that they had not been allowed to pass.

The PRESIDENT said his only object was to let the public know that these glaring instances are not fair examples of young men entering the profession. The teachers of the great public schools are perfectly convinced that the young men who go up to the Army Medical Board are not average specimens of those who have passed their examinations. The fact is that the Public Service is at a discount in the profession, owing to circumstances connected with it at the present time, which disincline young men of intelligence and fair attainments to present themselves as candidates, without some extraordinary inducement. There must be some cause for this behind the scenes—something “rotten in the state of Denmark,” if he might use the expression; and Dr. Parkes and his colleagues (the examiners) would do well to recommend the Army authorities to make the service more attractive to the medical profession.



## APPENDIX II.

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### MEDICAL EDUCATION, PAST AND PRESENT.

*To the Editor of the British Medical Journal.*

SIR,—Of all the numerous subjects which have been constantly under discussion for the last several years, both by the medical corporations and the profession generally, few have held a more conspicuous place than that of the education of the student, and especially in the early part of his career; and although it must be admitted that the tendency is in the right direction, and great credit is due to those who have insisted on a more advanced status of general education before commencing the professional curriculum, yet an important point has been, in a great measure, overlooked—the adaptation of the information acquired to the exigencies of general practice. A youth is taken from the upper forms of one of our public schools, passes without difficulty his matriculation examination, attends diligently the prescribed courses of lectures and hospital practice, and in due time, his proficiency having been proved by examination, receives a licence to practise. Perhaps he may have distinguished himself as a student, and taken honours at one of our universities or colleges; but place him at the bedside of a patient, or put him to perform a simple operation in surgery, and in all probability his position will be one painful to himself, and by no means advantageous to his patient.

Only a few days since, a fully fledged M.B. and M.R.C.S., who had taken the highest honours at an especially medical university, and whose clinical notes on cases were deserving of the highest praise, assured me, that during the four years spent in medical study he had not seen a case of measles. On more than one occasion have I engaged assistants with first-class testimonials, proving them to have been most diligent students, and yet they have been so utterly ignorant of the routine of ordinary practice, not knowing by sight the commonest drugs, being unable to perform the minor operations, and so utterly devoid of confidence at the bedside, that I have been compelled to decline their services. I am not singularly unfortunate in this respect, for, on comparing notes with my fellow-practitioners, it seems to be the rule rather than the exception.

The tendency to pass from one extreme to the opposite has ever been one of the failings of our profession, very damaging also to our reputation with the public; and although the retrograding to the old system of requiring a seven years' apprenticeship is not worthy of a moment's con-



sideration, yet, on no point am I more firmly convinced than this, that a short term of pupillage with a general practitioner, where the pupil has the opportunity of becoming practically acquainted with the properties of drugs and their doses, when he first begins to prescribe for ordinary cases, and performs minor operations under the eye of his principal, and gradually goes on to attend cases of more importance on his own responsibility, is the very best introduction a student can possibly have. It enables him to derive more instruction from hospital practice, and places him in a great advantage over those who have not had that privilege, and is of immense value both to himself and those under his treatment when he launches out into practice on his own responsibility. The want of such a practical introduction has blighted the prospects of many a young practitioner, and necessitated his taking a situation as an assistant, to acquire what may be called the business of our profession. Let me ask, then, is it not better to submit to this process at the commencement of the medical career, than after enjoying the freedom and liberties of a student's life, and with the first blushing pride of having acquired medical honours, to be compelled to submit to officiate in a subordinate capacity?

The difference between hospital and general practice is so patent as to require no demonstration. The class of patients—the circumstances in which they are placed—in the one, with every facility for medical and surgical appliances, and trained nursing; in the other, the absence of these, to more or less extent, besides having frequently adverse influences to contend with. There are also a large number of diseases which come under the notice of the general practitioner, but which are rarely admitted within our hospital walls. That confidence (under every emergency) at the bedside, which is so essential to success, rarely comes by intuition, and cannot be acquired from books, but is a gradual process. Upon these grounds, and others also, which would take up too much space to discuss, it seems to me a fair conclusion, that it is much better for the *alumni* of our profession, before commencing their purely scientific study, to have a short time of breaking in, by placing them where they can have ample opportunity of gaining confidence, and observing the details of general practice.

I am, &c.,

THOS. UNERHILL.

GREAT BRIDGE, TIPTON,

October, 1868.

[See also *British Med. Journal*, 16th Nov., 1878, page 751, "Hospital Practice versus Apprenticeship."]