The need for reform of the medical examination system / by T. Pridgin Teale.

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OF THE

MEDICAL EXAMINATION SYSTEM.

BY

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At the Meeting of the General Medical Council, June 1st, 1896, the following resolution was

Moved by Mr. Teale, and

Seconded by Dr. Pettigrew,

"That the present system of accumulated examinations and the enormous increase in the number of rejections resulting from it are not only unjust to the student, but damaging to medical education; therefore, that the time has arrived when the General Medical Council should consider (*a*) how far examinations and the occasions of rejection can be reduced in number; (*b*) how far, whilst maintaining effective examinations in those subjects which it is essential that every medical man should 'know' and 'retain the knowledge of,' it is possible to withdraw from the sphere of public examination several other subjects which it is desirable that every medical man should 'know about,' but with the details of which he need not permanently burden his mind, the 'bird's-eye survey' of such subjects being ensured by compulsory short courses of lectures with class examinations certified by the teacher."

The motion is substantially the same which was proposed at the last session of Council, the discussion of which was postponed at my request. Since the motion was placed upon the programme of business, two events have happened which go some way to justify the course taken. Two subjects, which would have been occasions of rejections, have been withdrawn from their scheme by the most important examining body in the United Kingdom, the Conjoint Board for England. These subjects are the examination in elementary anatomy at the end of the first year of study, and the proposed examination in pharmacology as a new and separate subject for rejections in the Final Examination.

In proposing such a motion, I am undertaking a serious responsibility not only in raising the question at all, but also in occupying the time of the Council with what I have to say. As to the latter point, members of Council, and not least the older members, will

bear me out when I claim to have occupied during my twenty years of service here but little time in making speeches. On the former, I wish to state views which have been forcing themselves upon my mind more and more, silence about which on my part might be blameworthy, and for the utterance of which no fit opportunity has heretofore seemed to have arisen.

During the past twenty years the Council has added to the subjects which have of necessity to be examined upon, has doubled the number of examinations which have to be passed, has, by its visitations and inspections, increased the stringency of examinations, that is, has caused a higher percentage of rejections, and finally has added one year to the medical course. All has been done with this object, that the medical practitioner may be turned out a more perfect article, and that incompetent men may be excluded from our profession.

You may rightly ask on what evidence such opinions, as are expressed in the motion, are based.

They are based upon :

1. The statistics of rejections, as reported to this Council.
2. The fallibility of examination in respect of :
   (*a*) The element of chance.
   (*b*) The inevitable hurry with which a great portion of our examinations have to be conducted.
   (*c*) The unsuitable misguiding questions which appear in examination papers.
3. The interference with clinical work.
4. The probable working out in practice of the five years' course.
5. The cost to parents of multiplied rejections.

1.—The Statistics of Rejections.

Let us take the first point, the statistics of rejections, and inquire what lessons they teach, and see what has been the attitude of the Council towards this question.

On May 25th, 1876 (Minutes, XIII., p. 135), it was

Moved by Dr. Andrew Wood, and

Seconded by Mr. Quain, and agreed to :

"That the table showing results of examinations for degrees, diplomas, and licences granted in 1875 by the bodies in Schedule A of the Medical Act be referred to a committee to consider the table of results, with reference to so large a number of rejections, and to report thereon."

And what was the large number of rejections that moved the concern of the Council? It was this, that the percentage of rejections in the Final Examination had risen from 12·4 per cent. in 1862 to 22·2 per cent. in 1876, and had become practically double. At the present time, twenty years later, they are 38 per cent. The Committee reported on June 5th (Minutes, XIII., p. 261), suggesting that the Executive Committee should obtain information from the licensing bodies on several points bearing upon the question. The Executive Committee on July 7th (Minutes, XIII., p. 341) addressed a letter to the several licensing bodies on the results of professional examinations. On March 9th, 1877 (Minutes, XIV., p. 277), Professor Humphrey was requested by the Executive Committee to report upon the answers from the licensing bodies. This report (Minutes, XIV., p. 64) was presented to the Council on May 16th, 1877.

As an outcome of this report, the Council "recommended" that there should be three professional examinations (Minutes, XIV., p. 99), and that a committee should be appointed (p. 110) to consider the subjects of professional examinations to be required, and the limitations of the range of the subjects by schedule.

Again, in 1880, after a resolution of the Council to resume the visitation of examinations, it was

Moved by PROFESSOR HUMPHREY,

Seconded by DR. ROLLESTON, and agreed to:

"That it be a direction to the Executive Committee to instruct visitors to inquire into the causes of the rejections which appear in the annual returns. (Minutes, V., XXII., 152.)

The percentages of rejections at the Final Examination had in that year risen to 28 per cent.

Lastly, on May 24th, 1893 (XXX., 52), a resolution,

Moved by DR. HERON WATSON, and

Seconded by DR. BRUCE, was carried:

"That the tables of rejections of the programme, May 23rd, 1895, be referred to the Examination Committee, with a view to prepare a statistical statement of the percentages reported in previous years, as well as those since the passing of the Medical Act, 1886, etc."

The primary object of this resolution was to find an explanation of the variability of the percentage of rejection in the several examinations. The outcome of the investigations by the Examination Committee was practically *nil*, except in one respect. A most

striking table of the rejections reported to the Council from the year 1861 to the year 1892 was drawn up by our Registrar, which, to my mind, speaks volumes, although its message seemed to fall on deaf ears in the Committee. What do we find in this document? Taking Final Examinations only: in 1861, rejections, 12·4; in 1876, 22·2; in 1880, 28·9; in 1892, 38·9. But there is another point in all this. In 1861. with very few exceptions, the Licensing Boards granted their qualification after one examination only; whereas in 1892 every Board held at least three separate examinations, not to speak of subdivisions. So that we have in the year 1892, besides the 38·9 per cent. in the Final, 47·1 per cent. in the Second, and 37·1 in the Primary. Let us put it in another form. In 1892 there were 9,820 examinations and 4,028 rejections, affecting at the outside about 2,000 students, assuming that the whole number registering went through to the Final Examination. And so it comes about that every student, if he took his share of plucks, would be rejected twice in his career. And this calculation takes no account of the further subdivision beyond those required by the Council, which entails a third pluck per man. There is a still further aspect of this question, the continuous rise in the percentage of rejections. Take each fifth year:

1861	..	12·4	1881	...	31·0
1866	...	14·5	1886	..	34·8
1871	...	16·6	1891	...	39·3
1876	...	22·2	1895	...	41·9

It reads as if the more we multiply examinations, the more fatal the Final Examinations become. Is the quality of medical training deteriorating? or are the examinations becoming more fallible as tests? This leads to my second point:

2 —The Fallibility of Examinations.

There are three aspects in which many of our examinations seem to be faulty: (*a*) in the element of chance which is more or less inseparable from all examinations, even the best; (*b*) in the inevitable hurry with which a great many are conducted; (*c*) in the unsuitable, misguiding questions which are frequently set.

(*a*) On the element of chance I will not delay you long, merely quoting from a scientific exponent of statistics, Professor Edgeworth, who has discussed the point in a paper, "The Element of Chance in

Competitive Examinations," *Journal of the Royal Statistical Society, September and December*, 1890. As a result of a careful enquiry, partly statistical, partly from observation and comparison of actual facts, he says, speaking of the examinations for the Indian Civil Service, the Army and Home Civil Service, "I find the element of chance in these public examinations to be such, that only a fraction—from a third to two-thirds—of the successful candidates can be regarded as quite safe, above the danger of coming out unsuccessful if a different set of equally competent examiners had happened to be appointed. A corresponding proportion of the successful—from two-thirds to one-third—must be described as unsafe. A rather larger number of the unsuccessful candidates would have a chance of succeeding at a re-examination."

"This question may also be asked: What number of displacements is most likely to occur in the event of re-examination? The answer in some cases which I have scrutinised proves to be about one-seventh part of the successful."

Again, "It may surprise even experts to hear that, as between two examiners, A and B, who upon the whole are fairly well abreast, occasionally A is ahead of B, and B ahead of A, to the extent of 50 per cent."

"It may be added that we have taken no account of what may be called extraneous elements of chance, such as the possibility of the candidate being out of sorts on the day of examination, or of the questions being unfavourable to him." "*Periculosæ plenum opus aleæ.*"—HOR. OD. II. 1.

(*b*) The inevitable hurry, seeing how much we have undertaken in the way of examinations, is more or less unavoidable, —an "inseparable accident," as logicians would say. But it exists in varying degrees. It is less in the bodies who examine few candidates, more in the case of those who have to deal with large numbers, until it culminates in the—what shall I call it?—of the ten minutes passing bell of the London Conjoint Examination, a patent device for making overwrought candidates nervous, and for gaining it the unenviable reputation of not infrequently rejecting good men and passing inferior ones. One may fairly ask, How can it be otherwise, considering the amount of work which has to be got through? And what a work! Let us look it in the face. In 1892 there were 9,820 examinations of

individuals. In each there would be on the average, I suppose, three subjects; which means 29,460. At least half of these subjects would involve a written, a practical, and an oral examination. So we must add two functions to one half, or one function to the whole, which doubles it, making 58,920 items in one year. How can this mass of work be done properly? What an array of examiners has to be employed! How can we guarantee that they are all fit for their work? There is no known means of testing their judgment, their appreciation of what ought to be required of a candidate, their appreciation of the fact that by the questions they set they in a great measure determine the future study of those who are coming forward. Are the questions set always unexceptionable from the point of view either of testing work or of setting the standard of future work?

This suggests the consideration of (*c*) unsuitable misdirecting questions. Let me select a few from my museum of interesting specimens. We will begin by making a study of questions set to first year's students, and as a preface to this, let me quote a passage from Sir George Humphry's report on Rejections (Minutes, XIV., p. 68):

"The burdening of the memory with mere facts, which have no direct or obvious connection with science or practice, with facts, that is, unassociated with ideas or practical utility, is on the whole of little value educationally or otherwise, and such facts make but a transient impression on the memory. Laboriously crammed together, with efforts worthy of a better purpose, they are with difficulty held until the examination crisis, and then quickly escape with little regret at their departure. Indeed, the examination in each subject of professional study should be restricted to the general principles and the more important facts of the science, and should be of such a character as to induce students, in their preparation for it, to observe and think for themselves more than is now commonly the case. The examinations should be regarded from an educational point of view, with reference, that is, to the influence which they are likely to exert upon the character, the education, and the mental training of the students who are to come after, as well as with reference to their being a test of fitness for admission to the *Medical Register*."

Perhaps the choicest examples of misdirected energy are to be culled from the questions set in "materia medica." And please remember that they are set for first year's students, who are supposed

never to have seen a sick human being except by accident, and, under our present degenerating system, as I should call it, are discouraged from entering the wards of a hospital or the operating theatre during their first two years.

Questions.

"Name six of the most important emetics. What dose of each is necessary to induce vomiting, and how is it best administered?"

"What is an enema? State the composition of each of the following [naming three] of which one is 'enema magnesiæ sulphatis.'"

This examiner seems to be enamoured of "enema magnesiæ sulphatis," as he asks the question again the year following. I wonder how many of those present here ever prescribed "enema magnesiæ sulphatis."

"Contrast the physical and chemical properties of castor oil and oil of turpentine."

"Name the pharmacopœial preparations into which potassii tartras acida enters and give their doses. Describe the action of this drug."

"Give an account of sulphur, including its origin, physical properties, official preparations, and doses."

"Describe the action of this drug."

"What is 'lini farina'? Give its source and enumerate all the preparations into which it enters." Happy "linseed meal," it will hardly recognise itself when set on such a pedestal of honour. Let us take leave of materia medica for first year's students with one quotation from a report of our Inspector and Visitor: "The dosage of various drugs, including picrotoxin, phenazonum, apomorphinæ hydrochloras, etc., many of which first year's students probably never heard of. The majority of the questions could not be fairly included in the subject of practical pharmacy as generally understood at the first examination of a student of medicine, although perfectly legitimate at the examination for the licence of a Pharmaceutical Society."

And this is the kind of rubbish that the elaborate and costly machinery of a public examination has to waste its energies upon.

I have a few morbid specimens from the Elementary Physiology Examination of the English Conjoint Board, but, thanks to the prevalence of good sense, this examination, as well as that in Elementary Anatomy, has disappeared.

From the questions set in Physiology at the end of the second year I have selected three which seem to me to be open to criticism on principle, as tending to cram.

"Explain the terms myopia, hypermetropia, astigmatism. How would you correct these errors of refraction?"

"Describe the appearance of the interior of the larnyx as seen by the laryngoscope. What changes are noticed in phonation and respiration, and how are they brought about?"

"What sounds can be heard on applying the ear to the chest? Explain exactly how they are caused."

For my part I do not see how these questions can be answered, except by means of mere verbal cram, by those who cannot have worked clinically at "refraction," "laryngoscopy," and "auscultation."

It is, however, when we come to the rather fancy subjects, such as hygiene and medical jurisprudence, that we meet, in the latter stages of medical education, with the most questionable questions. In hygiene, for instance:—

"What do you understand by the expressions 'effective population,' 'dependent population,' 'density of population'?"

"What impurities of a deleterious character are found in bread?"

"How ought a hospital to be constructed in order that each patient may have an efficient supply of pure air?"

"Define the word 'nuisance' according to law. Show the different statutory provisions under which nuisances may be dealt with."

"How will you dispose of the house-refuse (liquid and dry) of a large urban district?"

Questions such as these are suitable enough in an examination for a diploma in public health, but are unpardonable when set for medical students.

There is one more question, to which I will take the liberty of suggesting the answer:

"In the event of cases of typhoid fever occurring in a family, what steps should be taken to ascertain that the water supply and sanitary fittings are in proper order?"

My answer is, what I should do myself in such a case, "Send for the sanitary inspector."

Then as to medical jurisprudence. Were an examiner to restrict his questions to those parts of the subject which are really useful in practice, and with which in ordinary life a medical man is brought into contact, such as making a will, giving evidence in court, dealing with the insane, or with the apparently drowned, attempted suicide, and such like, he would be almost driven to give the same questions every year. As it is, he goes forth into matters which probably never come before one practitioner in ten thousand, and even then no doubt such practitioner would be obliged to refer to his book. For instance :

"What are the effects produced on the living body by intense cold? What *post-mortem* appearances have been observed when death has resulted?"

"Describe the symptoms and *post-mortem* appearances presented in a case of death from starvation."

With regard to the Final Examinations in the practical subjects of Medicine, Surgery, and Midwifery, it is an interesting fact that I find but few questions to criticise, but there are one or two comments I would venture to make as expressive of my own opinion. I will quote one question from a surgical and one from a midwifery and gynæcological paper.

"Mention the complications which may be associated with chronic suppuration of the middle ear, and describe the operation for opening the mastoid antrum."

"Describe the operation for vaginal extirpation of the uterus."

Now the setting of these questions for an ordinary diploma would seem to imply that they were operations that anyone might do without any more preparation than an ordinary student would get in reading for his pass examination, whereas they ought only to be attempted by men seriously intending to do the more advanced surgery.—*Vide* Appendix A.

The "conclusion" of the three Visitors in 1882 on a similar point, in reference to operative surgery in an ordinary qualifying examination, seems to me to be a sound one : "That for every 'minimum' qualification the examination in operative surgery should be confined to emergency operations, such as any practitioner may suddenly be called upon to perform—for example, amputation, deligation of arteries, catheterism, urethrotomy, tracheotomy, etc.—and should for the most

part exclude complicated operations not of sudden urgency, such as ovariotomy, excisions of joints, plastic operations, lithotomy, lithotrity" (vol. XIX., Visitation Report).

Let me conclude this part of my speech with another sentence from Professor Humphry: "Every question put must be regarded as a drop in the educational current of the future; and examiners must recognise that they are not simply judges of the students who come before them, but that they are in no less degree directors of, and so responsible for, the teaching of those who will follow" (Hunterian Oration).

3.—Interference with Clinical Work and Practical Training.

My third point is interference with clinical work and practical training.

So far we have been dealing chiefly with facts and statistics. The next point does not admit of statistical proof, and is one of testimony and inference. It is an opinion several times expressed to me by clinical teachers, and confirmed by young men who have recently completed their medical education, that advanced industrious students are unable to devote sufficient time to work in the wards and to self-training, because they dare not tear themselves away from the drudgery of book-work, dreading failure in the examination. As a result of this deficiency in clinical training and the want of a larger element in self-education, I frequently hear bitter complaints from medical men in country places, who find their newly-fledged assistants woefully deficient in their fitness for and adaptability to practice. They can talk about bacteriology and recondite neurology, but they have not the capacity for simple observation of the cases that come before them, nor the power of turning to profitable use the knowledge they have acquired during their career as students. Testimony such as this may not be, is not, exact evidence; but as a contribution to the evidence, though a small one, I give it for what it is worth.

On this point let me quote a hospital surgeon, Mr. Tobin, of Dublin. In his introductory address at the opening of the sessions 1895-96, at St. Vincent's Hospital, he says:

"It thus appears that there are two stages in the curriculum—a preliminary scientific stage, and a stage devoted directly to medical problems. It is with this second stage that I, as a hospital teacher, am most concerned, and the question that I ask you to consider with me

to-day is this, Does the student spend his time during this stage to the best advantage? As far as I can see he does not. For in place of being relegated to the hospital for his training during this second period, he is obliged to attend the school for theoretic lectures in medicine and surgery, and for examinations in connection with these lectures, and these examinations so dominate his views that he spends his time in hospital, not watching the changes in his patients, but on the look-out for ready-made answers to questions. If urged to make records of cases, he does so reluctantly, for he knows that from an examination point of view it does not pay; and if, towards the conclusion of his course, he is offered the position of resident pupil in a large and busy hospital, he often refuses it, because he is going in for his 'final,' and, of course, the one thing essential is to pass. His medical education, therefore, notwithstanding a large amount of hospital attendance, is literary rather than practical." "Moreover, education, as at present conducted, teaches us to see with the eyes of others rather than with our own." "Further, the regulations are armed with a revolver in the shape of examinations, which enforces the obedience of students. Nothing else could keep alive such a system—one which, as it were by violence, keeps theory and practice apart."

Akin to this question of impairment of clinical study, and really a part of it, is the general outcome of our present system. Let me quote from the report of our Visitor and Inspector on the Final Examination of one of our leading universities, whose candidates have gone through a three years' course in arts before becoming medical students, and who, if any, ought to show satisfactory results of medical training. The report says: "In no case was the answering of any of the six candidates we heard examined brilliant, in the majority it was poor; but they had a sufficient knowledge of clinical medicine to warrant the examiners in passing them."

In an examination of a Conjoint Board the Visitor and Inspector report: "Many of the candidates appeared to have a mere book knowledge of these subjects; and, when asked to explain their answers, or to give some reasons for the statements they enunciated as if by rote, were unable to do so."

Sir William Stokes, in opening the session at Meath Hospital, in October, 1895, makes the following statement as the result of his long experience as a teacher and as an examiner: "The student, wearied

and weighed down by an accumulation of courses, and with the sword of Damocles, in the shape of an annual examination, ever hanging over his head, has neither time nor inclination to do anything that, in student parlance, will not 'pay' in the examination. It seems to me that the outcome of most modern changes in medical education is in the direction of making students read not few books well but many books badly, and that the brain has been looked upon too much as an organ with an unlimited capacity for retaining, digesting, and absorbing, in a given time, every ascertained fact, not only of medicine and surgery, but also of all the sciences auxiliary to medicine. The attempt to carry out the arrangement is fraught with real injury to many, with disaster to some. I can speak with some confidence on this subject, after a long experience, both here and in Oxford, and I have satisfied myself over and over again that the failure of a large proportion of candidates to answer up to the required standard was due, not to want of diligence and honest conscientious work on their part, but simply to brain exhaustion from attempting to overload it with facts which were believed to be essential."

Professor Mitchell Banks, a member of Council of the College of Surgeons, for five years a most valued colleague on this Council, and an experienced teacher and examiner, said in an address to the Yorkshire College Medical Society in October, 1895 : "When he began teaching in Liverpool the Primary Examination of the College of Surgeons consisted of little but anatomy, physiology required being small in amount. The students did a great deal of dissection, and he was often surprised at the extent and accuracy of their anatomical knowledge. But for many years they had been steadily deteriorating in their knowledge, and he had been quite pained to note that when they came to be dressers in hospital their whole knowledge had vanished in a few months. It was the same as regarded physiology. One department alone—that relating to the nervous system and to electrical experiments ments therein—was now more extensive than the entire subject in his student days ; but what was the result? Endless time was spent in galvanising frogs and making tracings on drums, whilst only the other day a physician complained that his clerks seemed to be ignorant of the simplest functions of the liver and kidney."

Dr. Haycraft, Professor of Physiology in University College, South Wales, in his introductory address in 1893, says : "In my

opinion the medical student is overworked and badly worked. His examinations are in many cases foolishly detailed, entailing useless labour on his part; and any change that I should advocate would bring him less rather than more routine work.... Physiology has now become more than the rival of anatomy in the needless tax it lays upon the student's time."

4.—The Five Years' Course.

We now reach the fourth point—the five years' course.

Let us consider how the five years' course will work out in practice. When in 1890 the Council added one year to the previous minimum of four years, the aim of the Council, or at any rate the aim of many who were anxious to impose an additional year of study, was that this year should be a clear opportunity for clinical work at a hospital, or for work partly clinical and partly as pupil to a registered practitioner, freed from the ordinary anxieties attending preparation for a book-work examination. This fifth year so employed was to be the make-weight that was to compensate for what we have lost in the disappearance of the apprenticeship and of pupilage and the practical discouragement of clinical work during the earlier years of medical study. That it may be such a year is possible, but for most students it will have to be a sixth year, not a fifth. And why? As soon as the fifth year was added, what did we do? We allowed a new subject—biology—to thrust itself into the first year, which would so occupy the time and energies of most students that they would have very little chance of passing in anatomy and physiology at the end of the second year. Hence, the possibility of clearing off the medicine and surgery at the end of the fourth year being lost, the fifth year must be frittered away on ordinary examinations, and the clinical year becomes a sixth. The same result must happen to those who are plucked more than once—and the average student is plucked at least twice in his career, whether he be industrious or not. Some may maintain that such a result would be good, inasmuch as it would prolong their medical education and make them more fit for practice. I for one very much doubt it. Real education only begins when examinations have ceased, and I doubt whether, for the average student who is to become the

family doctor, his chances of making a good practitioner do not grow worse instead of better by the prolongation of the time spent in school and hospital under pressure of examination.

5.—The Cost to Parents of Multiplied Rejections.

The fifth and last point for consideration is "the cost to parents of multiplied rejections."

This is an aspect of the question which I have never seen stated, and one which, doubtless in the opinion of many, ought to be entirely ignored. It is worth being stated, nevertheless, and to some persons may be somewhat startling.

Let us take the report on the Final Examination in medicine surgery and midwifery of the Conjoint Board for England of 1894. In medicine, out of 865 candidates, 365 were rejected—42 per cent. In surgery, out of 916 candidates, 388 were rejected—42 per cent. In midwifery, out of 831 candidates, 264 were rejected—32 per cent. We thus have a total of rejections of 1,017 out of 2,612 examinations. Assuming that in every instance the candidate went up for re-examination, these re-examinations impose upon parents and others a cost of £4,784 in one year in the Final Examination of one conjoint body representing two out of twenty licensing bodies. Nor is this all. Some of the rejected candidates have to take out fresh attendance tickets at their hospital, involving the expenditure of several guineas for an additional three or six months' clinical practice. And even this is not the limit of expenditure for those who come up from provincial schools. For these we must add return railway fare, and the cost of living in London some five or six days.

I know not how far I may have convinced the Council that under our responsibility medical education is drifting in a wrong direction, or whether I can persuade it, seeing clearly the evils that exist, boldly, and with true statesmanship to face the question and find and apply the remedy.

Surely our ponderous machinery—like the mountain in labour—is producing the "ridiculus mus." *Propter vitam vivendi perdimus causas.* Losing sight of the end and aim of our educational machinery, we are worshipping the means and making them our golden calf.

Suggested Remedy.

In what direction shall we look for release from this incubus? On what lines can we plan amendment?

We must *decentralise*. We must *unload our public examinations*. We must relegate to the schools not only to teach, but to examine and to certify in all secondary subjects, such as elementary biology, materia medica, pharmacy, hygiene, perhaps even chemistry, and certainly forensic medicine. Then let all the rest be covered by three public examinations—one in anatomy and physiology, presumably at the end of the second year of professional study; one in pathology and therapeutics, at the end of the fourth year; and the clinical examination in medicine and surgery, together with the examination in midwifery (truly in midwifery, not in fancy gynæcology) at the end of the fifth year. Surely after that we may see the ten minutes bell, and all it implies, abolished. The licensing bodies will be able to afford to examine more thoroughly, less hurriedly, to find out what a student really knows, and to re-examine those on the border line of pluck or pass. Then, when plucking examinations are reduced from 9 (*vide* Report of the Conjoint Board for England in 1895) to 3, and become less matters of chance, there will be some room for calm clinical study, for self-training, for learning something during studentship of that very important and terribly neglected better half of the training of a true doctor, the knowledge and observation of a human being—that which was expressed in the wise saying of Andrew Clark—"I first attended to the man and then to the malady."

Could Brodie, or Green, or Lawrence, or Graves, or Stokes, look down upon the work of this Council, they would be amazed to witness how far we have departed from their ideals of the training of a medical man.—*Vide* Appendixes B., C., and D.

Appendix A.

The following questions were set for a final examination, but in deference to the suggestion of the Visitor and Inspector, were withdrawn:—

"What are meant by the terms 'Abulia' and 'Hyperbulia,' and what class of mental diseases come under each heading?"

"Give the symptoms and pathology of 'Syringomelia.'"

Appendix B.

Address of Sir H. Acland to Council, May 10th, 1877 (Minutes, XIV., 21).

"Sir B. Brodie, writing with the consummate knowledge of a life of observation and exertion, says:

'In accordance with your view of the matter, Sir Walter Scott has somewhere observed "the best part of every man's education is that which he gives himself;" and I willingly admit that, among those whose intellect is of a higher order, there are many who would ultimately accomplish greater things if, in earlier life, they were left more to their own meditations and inventions than is the case among the more educated classes of the community.'"

"Again, Sir B. Brodie says: 'I may venture to suggest whether, as regards the higher kind of education, too much is not attempted to be done, and whether it would not be better if the students were left to accomplish more for themselves.'"

Appendix C.

Graves' *Clinical Medicine*, Sydenham Society, p. 2.

"The human mind is so constituted that, in practical knowledge, its improvement must be gradual. Some become masters of mathematics and of other abstract sciences, with such facility, that in one year they outstrip those who have laboured many. It is so, likewise, in the theoretical parts of medicine; but the very notion of practical knowledge implies observation of nature; nature requires time for her operations; and he who wishes to observe their development will in vain endeavour to substitute genius or industry for time."

Page 14.—"It is not intended to assert that pupils now hear fewer clinical lectures, or attend a shorter time in the hospital, but it may be confidently affirmed that what they hear in these lectures, or see in the hospital, does not rivet attention or excite reflection now as formerly. For the pupil's avocations are so numerous, that he is hurried from one to the other, and has no time to devote to serious reflections upon what he has seen."

Page 19.—" Bear in mind, gentlemen, that when you come to treat disease, you approach the bedside as physician or surgeon, and not as chemists, botanists, or anatomists. This is the character in which you are to appear ; and, to the acquisition of knowledge which will prepare you for the discharge of its duties, you ought to apply your chief attention."

Page 24.—" They should never allow chemistry to cause them to absent themselves from the hospital for a single day."

Appendix D.

From *Memoir of Dr. Stokes*, New Sydenham Society, 1882.

Speaking of the modern system of cramming for examinations, he says : " It is a system the evils of which have increased, in place of diminishing. The overloading of special instruction will not help but really retard the production of the higher class of men . . . . It was not in this fashion that the fathers of British Medicine were moulded ; nor our Great Jurists, or our learned and pious Theologians were trained.

" Let us labour to place the teaching of medicine in its true position. Let us emancipate the student, and give him time and opportunity for the cultivation of his mind, so that in his pupilage he shall not be a puppet in the hands of others, but rather a self-relying and reflecting being. Let us ever foster the general education in preference to the special training, not ignoring the latter, but seeing that it be not thrust upon a mind uncultivated or degraded. Let us strive to encourage every means of large and liberal education in the true sense of the term, and so help to place and sustain our noble profession in the position which it ought to occupy."