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CONTENTS:

- Introduction. By the Editor.
1. By President Charles Kendall Adams, LL.D.
 2. By President Daniel C. Gilman, LL.D.
 3. By President Franklin Carter, LL.D.
 4. By President Isaac Sharpless, Sc D.
 5. By Professor Albert S. Cook.
 6. By Chancellor John Hall, D.D., LL.D.
 7. By President James B. Angell, LL.D.
 8. By Hamilton W. Mabie.
 9. By Ex-President James McCosh, D.D., LL.D.
 10. By Professor William T. Harris, LL.D.
 11. By Professor T. W. Hunt, Ph. D.
 12. By President Edward H. Magill, LL.D.
 13. By President Geo. D. B. Pepper, D.D., LL.D.
 14. By President James E. Rhoades, M.D.
 15. By Professor Robert W. Rogers.
 16. By Professor Robert Ellis Thompson, Ph.D., D.D.
 17. By Hon. John Eaton, LL.D.
 18. By William H. Burnham, Ph.D.
 19. By Chancellor C. N. Sims, D.D., LL.D.

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By Ex-PRESIDENT JAS. McCOSH, D.D., LL.D., Litt. D.

The objections to competitive examinations have been taken by a body of able and influential men. It should be noticed, however, that a considerable number of them, including not a few M. P's, have had no experience to teach them how to deal with young men, who have much strength but some weaknesses.

The objectors have evidently fallen into the "fallacy of objections." They have opposed the existing system without recommending any other with which to compare it. Till they propose better scheme and submit it to public criticism, it will be wise, in public institutions and teachers to retain the present plan, seeking always to avoid the bad forms and adopt the good forms of examination. Says Mr. Harrison: "Nor am I called to devise a counter project and suggest other tests than examinations for distinctions and prizes." It seems to me that this is the most important work for Mr. Harrison and the objectors to do.

In seeking to help and not to hinder them I think that attention should be called to the very different classes of young people to whom the examination is applied. The complainants make no discrimination and their objections read as if they were directed against the whole method.

There is the case of Children.—I confess I am not partial to the application of the method to infants or very young people. In teaching these the main aim should be to give a taste for the lessons, always taking care to secure the habit of accuracy in the answering. Pains should be taken not to foster too much of a spirit of rivalry which genders jealousy and envy, and may end in making self-confident boys proud, and discouraging the timid and the gentle. These evils of an immoral character will very much counteract the good derived from the smartness produced by premature competitions. I have always had my doubts of the super-excellence of the British plan of paying teachers by results determined by examinations.

There is the case of High Schools, Academies and Upper Schools generally.—Here examinations, written and oral, should have a place, mixed up always with other stimulants, such encouragements to regular and punctual attendance and to good conduct, which is as much to be attended to, for the future welfare of the child as a smattering of scholarship.

There is the case of Colleges.—Here examinations, being always of the right kind, are essential—what constitutes the proper kind is to be considered farther on in this paper. Those of us who have had under them large promiscuous classes know that young men from 16 to 20 years of age need both stimulus and constraint to induce them to persevering study. Not a few of them are so lethargic in disposition, or have so little firmness of purpose, or are so fond of games or society, that they need both a spur and a bridle. Many of them will confess this, and acknowledge that they are greatly aided by having examinations periodically, to sum up their studies as the merchant balances his books once or twice a year. A college taking no such reckoning will soon fall into a disorganized state, with it may be a few bright scholars; but when the students are wealthy, with a

popular body of "gentlemen at large," and when the students are poor, with raw and unpolished youths, addicted to meanness and trusting to charity; both classes being full of conceit, and claiming to be superior to non-college youths, who may meanwhile surpass them in activity and independence of mind, called forth by the necessities in which they have been engaged.

There are the cases where high money rewards are to be gained, such as fellowships, prizes, and lucrative offices. In these the gifts should not be made to depend on a single examination, conducted by an inexperienced examiner. With the examination properly written and oral questions, put by several professors, there should always be required written papers or essays, in which the candidate has an opportunity of showing what he can do leisurely, as well as what he can do on the promptings of the instant. In these combined means there is ample opportunity given for the display of independent thought, literary talent, good sense, and even genius. I believe farther, that competitions for high rewards should always take into account the previous work of the student, sifted in the proper manner. Only those who have reached a certain standard should be allowed to compete. In all the examinations, full scope should be allowed to varied talents, to reading and scholarship, and very specially clearness of head and good sense.

We have now to look at a different class of cases: those in which *the presentation to offices* is determined by examination. I may mention that I took a part in the introduction into Great Britain of the system of examinations for civil offices. It is acknowledged on all hands that the system is an immense improvement on the old one of patronage, in which men in power commonly distributed public offices according to personal or family partialities, or to gain political friends, often to provide for some one not able to provide for himself otherwise. The evils of the family patronage had become so strong and scandalous that there was a universal and pressing demand for a change, which was granted after the passing of the Reform Bill. At a later date the examination for civil offices has been adopted by the United States somewhat reluctantly, and only partially, the politicians being bent on keeping the appointments for party ends.

That my suggestions may get a hearing, I may be allowed to state that what I have to say is the result of a large and varied experience. For sixteen years I was an examiner as well as a professor in the Queen's University in Ireland, and in Queen's College, Belfast. When there I was invited to be one of a dozen or fifteen such men as Sir James Stephen, Bishop Temple, Sir Alexander Grant, Max Müller, Rawlinson, to organize the system of testing candidates for the Civil Service of India, which opens to young men the most lucrative offices in the world, and I had to examine 182 applicants. Since I came to Princeton twenty years ago I have had to examine every year upwards of 200 students in my classes of philosophy, and to overlook in a general way the examinations of our forty professors and tutors.

As the result of my whole experience, I am prepared to declare emphatically that I am sure much good will arise from the

publication and circulation of the paper of the objectors. I am convinced that the evils which they have spoken of and denounced exist, and that it is of vast moment to have them remedied. This is not to be done, however, by abolishing examinations, but by improving them: in improving both the examiners themselves and their modes of examinations. Max Müller says "With regard to the Civil Service, I know of no substitute for competitive examinations." Surely the same may be said more emphatically of our upper schools and colleges. If so, our aims should be to perfect, as far as possible, our method or methods of trial. I am so glad that the whole subject has come under discussion. Let improvements be suggested, and let these be sifted by teachers and by the public prints competent for the work. But whatever we do let us not think for one moment of returning to the old system with its favoritism, its caprices and its party ends. This is what politicians in America would drive us to, and lazy teachers will join them; and they may take advantage of this paper of eminent Englishmen to secure this end.

We must begin our reform by purifying the fountain. We must see that the examiners are competent, specially that they be sternly upright and impartial. In competitions for public offices we must determine that only high class men be appointed, men above all temptation to favoritism and dishonesty, and to secure the public confidence above all suspicion. In order to find such examiners they must be amply remunerated. Our politicians must be compelled by enlightened public opinion to make the adequate provision. The questions should be prepared with great care. I have heard a professor boast that he could get up a paper for an examination in half an hour. I think that in our higher competitions the questions should be for hours or days before the minds of the examiners who must see that they thoroughly test the ability and preparation of the candidates. Special pains should be taken to secure that success be not gained by mere *cramming*, in which what is not got up for the occasion is speedily forgotten or recalled only with a feeling of disgust. I hold that the man is not fit to be an examiner who cannot discomfit the *crammer*.*

In many cases the questions drawn out might be submitted to some person or persons fitted to overlook them. In the first examination for the Civil Services of India Sir Alexander Grant and I, who had charge of mental and political philosophy, united in preparing the questions and in reading and estimating the questions. When I was in connection with the Queen's University in Ireland Professor, now President, Moffet showed his questions to me and I submitted my questions to him, and both read the answers. In Princeton College I have expressed a wish that the younger teachers should show their papers to the heads of the department and consult with them in all cases of difficulty. I believe that all higher examinations determining the destinies of

*A short time after the first Indian Examination I was seated at a table d'hôte in Geneva when my name happened to be mentioned, when one of the Dons of Oxford came round to me and asked if I was the examiner whom none of the *coaches* of Oxford could cram for. I answered that what he said was one of the highest compliments ever paid me.

young men, and bearing on the best interests of a country, should be superintended by a committee or a bureau.

I concur in most of the objections which have been taken to the common modes of examination. The examinations may be conducted in a narrow and technical spirit, all relating to small details. Or they may be *catch* ones capable of being answered only by those who have a petty readiness or who happen to have read on the special little topic of the query. Or they may be fitted and intended to show the ingenuity of the examiner, and not the reading and thought of the student. Very frequently no other talent than memory may be required in order to get high grades. In all cases there should be evidence that the subject is not merely memorized (as we say in America), but has passed fully through the mind of the candidate, and that he has ruminated and digested it. It is because this rule has not been attended to that what is called forth and rewarded has no influence whatever in strengthening the mind, or preparing for future usefulness. In all cases the questions should be so put as to give the candidate a fair and full opportunity of showing his capacity and attainments, his originality of research, his power of independent thinking, and I repeat, his good sense. The persons tested by such questions are almost sure to be fitted for the practical work for which they are destined. It is pleasant to me to remember that the candidate I placed at the head at the great Indian examination, Charles Aitchison, son of a house painter, stood at the head ever after, became Foreign Secretary for India, and then Governor of 20 millions in the Punjab, and is now retired as Sir Charles Aitchison. It is equally gratifying to remember that a pupil of mine, Robert Hart, son of a working miller, placed first by me at two examinations in the College, and afterward first at an examination open to the students of all the colleges of Great Britain and Ireland, is now Sir Robert Hart, lately Ambassador from England to China, and a Mandarin in charge of the external revenue of that country, and is perhaps the ablest man in it. I may be permitted to mention that of the seventy-one alumni of Princeton College who have been appointed professors in our colleges or higher institutions, almost all of them showed their talent in competitive examinations, and no one of them has proved a failure in the chair which he occupies. It should be added that in recommending I always looked to their character and good sense.

In order to accomplish these practical ends it is essential that there should be both oral and written questions, the former to call forth reading and reflection, and the latter to enable the examiner to take the candidate out of the ruts of cramming when he discovers traces of it. It is often expedient in colleges to set two sorts of questions one for all to test industry and knowledge, and the other to give evidence of independent research and thinking.

In the colleges there should be constant recitations (as we Americans call them) to secure constant attention. But there should also be formal written examinations to secure that the student has mastered the subject in its entirety. These examinations should not be held so often as to prevent students from

pursuing independent courses of study without interruption. But they should be held once a term or once in the half year to prevent any student from wasting a large portion of his time in idleness, trusting to make up his work at the examination season.

It should be provided that when the competition is for a business employment something more than mere literary attainments should be required. In botanical classes they submit a plant to be examined; in anatomy an organ of the body. In the common trades there might be the probation of a few weeks in a workshop.

The aim of the objectors is evidently to keep examinations from crushing the fresh life of young men. My aim in this paper is to show how this end can be accomplished.

Princeton.

JAMES MCCOSH.

BY PROF. WM. T. HARRIS, LL.D.

Both sides in the discussion of the question of over-examination seem to admit the existence of present evils in the system. On the other hand, neither side seems to see clearly how to dispense with examination in some form. The question, therefore, is reduced to one of reform rather than of radical change. The advantages of examination should therefore be canvassed, and comparison made with the acknowledged evils. By this process it is possible to discover where the limits are to the utility of the device in question.

I.

1. Examination has an unquestionable value to the pupil pursuing his studies, in the fact that it gives him self-knowledge. He discovers the defects in his method of study, if the examination is properly conducted. He learns, too, in what direction to turn his effort and on what points to lay more stress. Is he defective in his grasp of details, or does he fail to seize the essential, organizing idea of the whole subject?

2. It is obvious, too, that an examination is necessary in order to show the teacher the results of his work and enable him to direct his energies towards the correction of wrong tendencies.

3. Examination has its further utility in the process of grading and classifying pupils—furnishing a standard of qualifications, a test for promotion from a lower grade to a higher. This seems a legitimate function of examination, but here begins the liability of abuse which must be considered under the second division of our subject.

4. A distinct use of examinations has grown up in the competition for places in the civil service. This involves greater dangers, which are likewise to be discussed.

II.

Under the acknowledged evils that competitive examination involves, the following are the chief ones:

1. One-sided training occasioned in the community—neglect of the physique.

2. It destroys good methods of teaching by narrowing the horizon of sympathy.