

THE FACULTY OF ARTS—
THE HEART OF A UNIVERSITY.

AN ADDRESS
To the Convocation of McGill University,

MONTREAL, APRIL 30th, 1891.

BY

ALEXANDER JOHNSON, M.A., LL.D. (Dublin),
Professor of Mathematics and Natural Philosophy.

VICE-PRINCIPAL,

AND DEAN OF THE FACULTY OF ARTS.

Montreal :

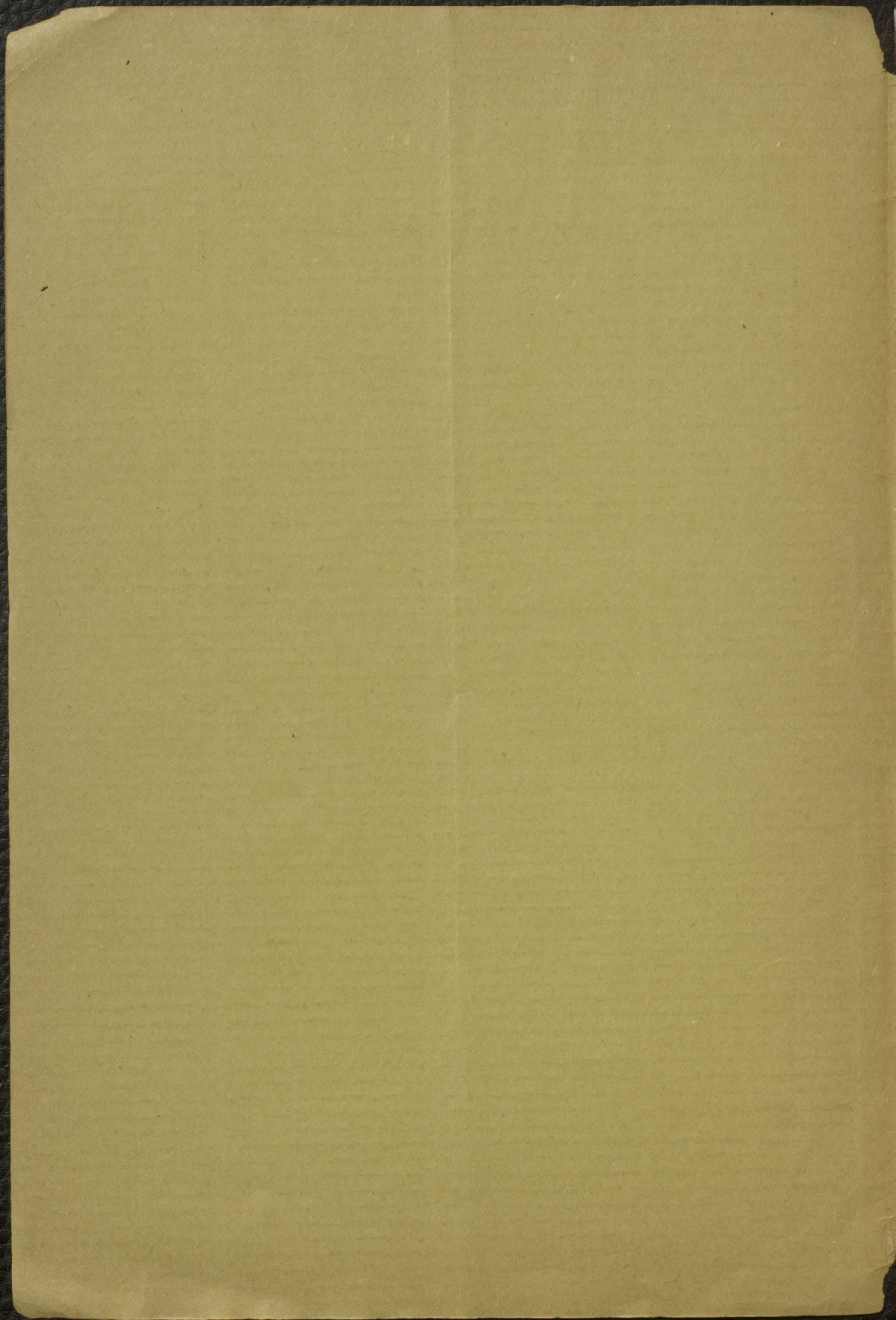
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THE FACULTY OF ARTS

THE UNIVERSITY OF TORONTO

AN ADDRESS
TO THE FACULTY OF ARTS

BY
THE VICE-CHANCELLOR

THE FACULTY OF ARTS—THE HEART OF A UNIVERSITY.

*An Address to the Convocation of McGill University,
April 30th, 1891.*

MR. CHANCELLOR AND MEMBERS OF CONVOCATION.

Last year, at the meeting of Convocation in this hall, I had the honour to make a few remarks concerning the position of the Faculty of Arts relatively to the other Faculties of the University.

I gave utterance to truisms merely, but they seemed to me appropriate, and perhaps necessary, at a time when other Faculties were receiving such a wide expansion that there arose a corresponding necessity for broadening and strengthening the Faculty, on which as a base the whole superstructure of every University is raised.

Reason for choice of subject.

I learned afterwards that there were more than I expected among the auditors to whom my truisms were surprising novelties; and I have found, too, that there was and is a widespread feeling of anxiety on the subject both within and without the University.

Subject, and limitation of treatment of it.

I purpose, therefore, now to explain and illustrate for those who are not familiar with the constitution of a University the remarks made then. As regards the broad statements made concerning the position of the Faculty of Arts, there is no dispute, and I shall therefore make no attempt at proof. I said that the Faculty of Arts, if standing alone, would constitute a University; that, if it were absent, all the other Faculties together would not be a University, but only a collection of separate Professional schools.

Illustrations by simile of the position of the Faculty of Arts.

I compared it to the body of which the other Faculties are the limbs. I compared it also to the heart which drives the life-blood circulating through the body. I have compared it just now to the base of a stately building, which must be strong enough to support that building. All these are old and oft-used similes.*

Error.

In this University there are practically six faculties—Arts, Law, Medicine, Comparative Medicine, Applied Science and Theology (*a*).

Now, there are too many who think that all these faculties are on the same level, each having an independent existence. They are not aware that there is, or ought to be, any organic relation between the faculties. They regard them as a number of separate bodies, bound together only in so far as they are connected with the one common corporation, and supported by endowments managed by one common board, the "Royal Institution;" looking on their mutual relation as that of a bundle of sticks tied together by a couple of cords, rather than that of branches of a tree springing from the same trunk.

Causes of the Error.

The main cause of this error is, no doubt, the fact that a student may, in most cases, enter any Faculty, and proceed to a Degree in it, without even presenting himself in any other. But it derives no mean support from the constitution of our University Corporation, in which the Faculties are all placed on an equality, or nearly so. To these causes must be added a very general misuse of the word "education," which, although for want of a better word in the language, it is, to some extent, inevitable, yet gives rise to a very dangerous misinterpretation.

* Bacon, for the same purpose, adapts the famous apologue employed by Menenius Agrippa of the belly and the members.

(*a*) I mention the last, for the four Theological colleges have the practical advantages of a Faculty, with the great advantage added that they are free to develop themselves, untrammelled by the judgment of external bodies.

Status of the Faculty of Arts.

Now, I wish to point out to you, as clearly as I can, and to assert with the utmost emphasis that the status of the Faculty of Arts is different from that of any other. It ought to have an organic relation with every one of the others, while these others have no such relation one with the other, except through the Faculty of Arts. Every student in the University ought to pass through this Faculty, in part at least, if he cannot proceed to the B.A. Degree.

The only Educational Faculty in the University.

Why is this? Because the Faculty of Arts is the only *educational* Faculty in the University. There is no other. The other Faculties are not educational Faculties, nor are they intended to be so.

The office of the other Faculties is Professional Instruction.

Their aim is simply to give Professional instruction, not education. Here, unfortunately, the general misuse of the word education will probably cause many to say "but do we not speak of a legal education, medical education, theological education, and so on?" Undoubtedly this practice is common, and it is difficult, perhaps even impossible, to avoid it; but a little consideration will show that there is here a real misuse of the word education, that the general tendency in the popular use of language to confound words which have distinct meanings has prevailed here, as well as elsewhere, in obliterating the marked distinction between education and instruction.

Distinction between Education and Instruction.

Is there a difference between these two words? Unquestionably. (1) *Education* refers to the development of the mental powers, and men do not study medicine or law or engineering for the purpose of developing their mental powers, but in order to acquire that professional knowledge which is necessary for their special work in life. No doubt, there must be some mental development in the process of acquisition, but it is no more education than the development of the muscles of a blacksmith's arm is an athletic

training. To this misuse of the word we can oppose the common use of another term, which points distinctly to the error: What is the meaning of the words *University education*? When we say a man has had a university education, do we mean that he has been a medical student, or a law student, or an engineering student? We certainly do not, not even if he has studied in one of the Faculties of the University. We mean emphatically that he has passed through the Faculty of Arts and has taken his B.A. Degree. (2) *Instruction*, on the other hand, from its very derivation, means a building on something— a foundation is presupposed, and the superstructure is to be raised thereon. Hence, the term “instructing officers,” used in our calendar, is more especially applicable to the professors in the professional faculties, who are the large majority. The knowledge which they give should be “built on” and added to that which is obtained in Arts. This, I am sorry to say, is to a large extent only a theoretical relation between the Faculties with us (a).

(a) The same confusion between education and professional instruction is likely to be fruitful of trouble outside the University walls. By the Act of Confederation the legislature of each province may exclusively make laws in relation to education. Hence it is argued that as universities are places of education that they are nothing else, and that the professional instruction given in them must come under the same head, and must, therefore, be exclusively dealt with by each province, and that neither it nor the degrees associated with it can be touched by the Dominion Government. Hence came what looks a very absurd result a short time ago. The different Theological Colleges of the Church of England in Canada agreed to have one common examining board for degrees in divinity, and one central authority for conferring the degrees, but when they applied to the Dominion Government for a charter for this purpose, the Cabinet, guided by their legal advisers, declined, on the ground of the clause in the Confederation Act. Nevertheless, the central authority was created, but it was done by going to each separate province and getting an act passed in each, empowering the same central authority to grant and confer the degrees—a clumsy remedy which throws ridicule on the cause which made it a necessity. Now, when one considers that the reason for putting education under the control of the Provincial Legislatures was because of the questions of religion involved, we see that the confusion between the terms education and instruction led to the very curious consequence that a Roman Catholic legislature in Quebec had to decide whether it ought or ought not to grant the power of giving degrees for the encouragement of the study of Protestant Theology. I believe it is the same cause which interferes at present with the creation of a Board for the general registration of medical men for the whole Dominion.

Why the training in "Arts" is so effective an education.

It may be asked why the training in the Faculty of Arts should have such a remarkable effect in training the mind, and why the studies in other Faculties should not have an equal effect.

It would be out of place to do more than briefly allude to the manner in which the effect is produced. I think there can be little doubt but that it is due largely to the fact that we can hardly think without words, and that in the Faculty of Arts the study of words and their combinations forms an important element. Just as in Algebra, the man who clearly understands the symbols, and is skilful in their manipulation, can state and solve his problems, so the man who has a good mastery of words,—of English words, I mean—and of their combinations in sentences will be most likely to receive ideas quickly, to compare and reason upon them. If we take the old logical division of the chief operations of the understanding as (1) simple apprehension, (2) judgment, (3) reasoning, we can readily, I think, trace the advantage of the command of language.

But as we do not know fully a chemical compound until we know its elements, so we cannot master English without a knowledge of Latin and Greek, which enter so largely as elements into it, and have moreover the inestimable advantage of being the best types for the study of the general laws of language in the clear expression of ideas.

If so, it is possible that the same remedy,—clumsy though it be,—may be applied. But whether it can or not, it is evidently absurd that a medical man in Canada, if he crosses a river or an imaginary line in his native country, ceases to be a professional man, and can only heal his near neighbors as an act of benevolence. If he takes a fee he is treated as an ordinary quack.

Perhaps the absurdity of it may be shown more clearly, if possible, by the fact that, a profession, by associating itself with a University, may have its wings clipped, and from having the free range of the whole Dominion may be narrowed to a province. I throw out the hint for the benefit of our Veterinary friends, who may by-and-bye find that there is more honour than profit in being turned into a Faculty of the University. I am not aware that railway or mining engineers have yet been touched by the Confederation clause, but their time may come.

Practical test of superiority of training.

Whether we agree in the theory or not, we have had for many years in our Faculty a remarkable result which it readily explains, and which it would be hard to explain otherwise.

We have two bodies of students attending the same classes in our Faculty. The main difference in their courses being that the one set (students of the Faculty of Applied Science) do not study classics, while the other set do. They both study science. Of course the first set have science as their main subject, and they necessarily take more of it than students in the *ordinary* course in Arts. It would be natural therefore to suppose that on the whole they would do best in the examinations in science. But, on the contrary, it is the testimony, I believe, of every single Professor of science in our Faculty, that, leaving out the men of high natural ability who may appear in either Faculty or in both Faculties, and for whom, not being sufficiently numerous, there is no adequate test, the *average* answering in *science* of the students in Arts, who take both classics and science, is better than the average answering of the students who take science and not classics. This has been the uniform result, year after year, for many years past. A similar conclusion was reported in Germany, as the result of observations carried on over ten years.

Office of the Faculty of Arts not limited to Education.

But though it is the office of the Faculty of Arts to quicken and develop the mental powers of its students, it is not its only office. It also adds large stores of knowledge. I need hardly say that it is not the whole office of the Faculty, not even the main object of its existence, to prepare for the other Faculties. On the contrary, this preparation is only one means for attaining its end. In this way it spreads over the country men of cultured minds, who will aid in not only maintaining but in raising the nation in the scale of civilization. But to discuss this would be to consider the object of universities. My subject is more limited.

I have said that educational work belongs to the Faculty of Arts alone; professional instruction alone to the other faculties, and I hope that the distinction has been made clear. It may be well next to speak of the connecting links between the Faculties.

**How the Faculty of Arts gathers the others round it.
Literature and Science, the Sub-divisions of "Arts."**

The work of the Faculty of Arts may be divided broadly into two parts, viz., literature and science, and in some Universities (*e.g.*, in France, and Laval University, Quebec, following the precedent), the degrees of Bachelor of Letters or of Bachelor of Science may be conferred separately by this Faculty instead of Bachelor of Arts, which includes both.

It is this two-fold capacity that has drawn round it the other faculties, which differ so widely one from the other.

Faculties of Medicine and Applied Science.

Apart from the incomparable value of the general education given, its Chemistry, Botany, Geology, Physics and Mathematics associate it with the Faculties of Medicine and Applied Science.

Faculty of Law and Theological Schools.

Its Languages, Literature, History and Philosophy make it attractive to the Theological schools and the Faculty of Law.

Exemplified in the History of the University.

In fact, the history of the university shows this to some extent. The Theological schools were established here because of the Faculty of Arts.

Origin of the Faculty of Applied Science.

The Faculty of Applied Science has grown out of the Faculty of Arts; it has risen from being a department of the Faculty, with a single professor of Engineering attached, to be what it is to-day. It owes its existence to the strenuous efforts of our Principal, Sir William Dawson, to give to Canada the full benefit of the science taught in the Faculty of Arts by teaching also the applications of that science to ordinary life.

Relation of Science to Applied Science.

One is the parent of the other. Science of Applied Science. The first is the spring, which is the source of the stream to which

the other corresponds. There is the same relation between them as between Faraday, the man of science, the discoverer, and Edison, or Brush, or Gramme, the inventors who have developed the practical application of his discoveries.

Faraday—the Man of Science.

When we see the wonderful results of these before us to-day in the electric light, electric motors, and other almost innumerable applications, and estimate however roughly the money rewards to the inventors, we can appreciate the moral grandeur of Faraday when he deliberately declined to follow out his discoveries to their practical applications, not that he despised these, but that he knew that other men could take them up, while he reserved himself for more arduous and nobler tasks.

“I have rather been desirous,” he said in 1831, “of discovering new facts and new relations dependent on magneto-electric induction than of exalting the force of those already obtained, *being assured that the latter would find their full development hereafter.*”

Faraday's words mark the distinction between Science and Applied Science in its highest form.

In these words he marks distinctly the relation between *pure Science* and *Applied Science* in its highest form, between the Faculty of Arts in one of its divisions and the Faculty of Applied Science.

Division of Labour.

The distinction is real, and it is of the utmost importance to the progress of both that there should be no confusion between them, that the division of labour which is clearly enough indicated should be carefully maintained. If there be any value in the principle of division of labour, it exists here as elsewhere. It is true that the term Applied Science is not perfectly definite, for there is a large amount of the applications of science in the two Medical Faculties as well, and the term might be made to include them.

Misnomer used by Students of Applied Science.

But it is pretty fairly understood, and therefore it is most unfortunate that our students should be getting into the habit of calling the Faculty for brevity by the misnomer—the Faculty of Science.

Faculty of Arts—the only Faculty of Science in the University.

It cannot be too strongly emphasized that the Faculty of Arts is the only Faculty of Science in the University, just as it is the only Faculty of Literature—that the term “Arts,” *i.e.*, the liberal arts, includes both science and literature.

The Faculty of Arts—The heart of the University. Why?

But it would be wrong to suppose that professional faculties gather round a Faculty of Arts in any University here or elsewhere, in order only that their students may get the special teaching which is beneficial to their own professional work. No doubt this is the reason in part, but it is a small part. The true object is that students may pass through the Faculty of Arts first, and get that wider culture which will prevent them from being merely doctors or merely engineers, while at the same time it will make them better doctors and better engineers. That it will do this there can be no doubt.

Contrast between B.A.'s and others in the Professional Faculties.

It follows from what I have said before that *no one has had a University education who has not taken his degree in the Faculty of Arts*, that is, in order to be an educated man in the fullest sense, he must have done this, and he will reap the advantage of it.

In fact, while Graduates in Arts rise smoothly and steadily by their education through the Professional Faculties in every University to the proper level of their profession, others who have not this qualification hardly move of themselves, but are dragged into their profession by a pull and haul process, which the Professors naturally do not like. Hence the suggestions and recommendations which are offered to candidates for admission. Within this very month I heard the representative of our own Medical Faculty suggesting plainly that it would be better if the candidates for medical training remained longer at School; while the Faculty of Applied Science in its Calendar politely dwells on the advantage of taking at least two years in Arts.

Necessity for stronger action by the Professional Faculties in Canadian Universities.

But these are merely recommendations ; something further must be done, and be done by the Faculties themselves, if the professions are to hold their long-established position of respect in the minds of the public.

Montreal.

We, here in Montreal, stand now at the parting of two paths, one of which tends strongly to make each Faculty a separate institution cut off from the Faculty of Arts, and yet with power to sway its course through the corporation, where for two representatives of the graduates in Arts there are seven from the other Faculties, and a somewhat similar proportion for the Professors.

The other path which we may follow is that which tends to induce every man to graduate in Arts before entering any of the others, making them thus, in the only true sense, the higher Faculties. This path we have followed hitherto, although with very slow and feeble steps, offering some slight inducements to candidates desiring to combine the work of two Faculties at one stage of their course.

But now, three of the Faculties are increasing the purely professional work so greatly as to make it very difficult to do this any longer, and two of them say plainly that all inducements for a student in Arts to begin learning simultaneously in another Faculty must be cut off—that his whole time must be given to his professional Faculty. Undoubtedly, this is due in part to a true professional enthusiasm, and is so far laudable. It is due probably also in part to the recent magnificent endowments, to a desire to do something in the raising of the professional standard which shall accompany the elevation of the University in the eyes of Canada.

But I question very much whether it will really attain the end proposed. It places two alternatives before the candidates: either come into our Faculty, comparatively ignorant (and we will let you in, although we grumble at your ignorance), or else wait till you finish your course in Arts. Considering that this last would involve, as a rule, a stay of eight years in the University, whereas, a man in a hurry to earn money by professional work

can finish his course in four years, it is easy to see which alternative will most likely be taken in most cases, and how it will lower the educational tone of the Professional Faculties.

Theological Colleges in Montreal—Examples to be imitated.

I have said nothing here of the Theological Colleges. Of them I can testify that they are doing their very utmost to make their students take the full course in Arts; and they are succeeding to a most remarkable extent.

The Clerical Profession, probably the best educated in Canada.

If other Theological Schools in Canada are making efforts equal to those made here, then I feel sure that at this moment the clerical profession must be the best educated body of men in Canada. Take our graduating class in Arts to-day. Eight Bachelors in Arts are, so I learn, going into the ministry, while only seven altogether are going to the three professions of Law, Medicine and Engineering.

European Universities on a higher plane.

In considering this matter, it is well not to limit our view to Canada, but look to the universities of Europe, and acknowledge that there are some there which, in this respect, stand on a higher plane than ourselves. As an example, I will take that with which I am best acquainted—the University of Dublin. Before doing so, I would remark, however, that I do not regard it as at all possible, at any rate for a very long time, and perhaps not even desirable, to try to exact at any time to the fullest extent the conditions that it lays down; but I point it out as showing what can be done under favourable circumstances.

Dublin.

Besides the Faculty of Arts, Dublin has four others: *Divinity, Law, Physic and Engineering*. These four, however, are called Schools, not Faculties, but they are the same as our Faculties. The test for admission is however much more severe; no one is

allowed to enter any of them unless he has first passed *two years in Arts*. After admission, he can continue his studies without taking any more of the Arts Course ; but, on the other hand, if he does not, then when he has finished his Professional Course he gets simply a *diploma* or *license*, testifying to his studies—he *does not get a degree*. There are degrees ; but they are reserved for those who become Bachelors of Arts. A Bachelor of Medicine or a Bachelor of Engineering must have been previously a Bachelor of Arts.

Certificates v. Degrees —Massachusetts' Institute of Technology.

No doubt, for practical purposes, the certificate or diploma testifying to his studies will be nearly as good, just as the certificates of the Massachusetts Institute of Technology, Boston, which is not a University, and cannot confer degrees, will be at least as good in public estimation as our degrees in Applied Science, at any rate for some time to come.

Superiority of Professional men who are also B.A., (*caeteris paribus*.)

At the same time, all experience proves, that man for man, those who have taken the B.A. degree first are better in their professions than those who have followed professional studies only.

Universities in which all Graduates must be Graduates in Arts.

One consequence of the rules in Dublin (not that it is limited to Dublin) is worthy of your attention. Every graduate in Dublin (and there are several thousands of them) must be a graduate in Arts, whether he be a graduate in other Faculties or not. Hence, in talking of the rights or privileges of graduates there, the meaning is very different from what it would be here.

In fact, as you see, the graduates in our Professional Faculties who are not graduates in Arts would not be regarded as graduates at all. Seeing, then, that this University has conferred privileges and power so liberally upon them, it behoves them to use these with the greatest possible discretion, and not meddle rashly with the work of the Faculty of Arts, lest by injuring it they injure the University itself, and therefore their own standing in public estimation.

Present condition of the Faculty of Arts.

And now, Mr. Chancellor, having said so much of the relation of the Faculty of Arts to the other Faculties, let me say a few words of its condition. I am happy that I can speak of its continued progress; it is the largest of all the Faculties numerically, having about 340 students of its own, and, if we include those from other Faculties, over 400 students attending its classes. I can say also that its wants are growing with its growth. What I said last year I may repeat—that our lecture-rooms are too small for the number of our students, our library too small for the number of our readers, our Convocation Hall too small for the number of our friends, our professors too few for the number of our lectures, and our income too small for our expenditure. This last is a matter that concerns the Governors specially.

The Faculty of Arts may be compared to a lad who grows too fast for his friends' powers of observation. While his clothes are still good, it is suddenly noticed some day that they have become too small for him. His arms are sticking a long way out of his coat-sleeves, showing a bare expanse above the wrist where none ought to be, just as our students are to be found squeezed into the alcoves in the library, although there are printed rules staring them in the face, forbidding them to go there. The comparison might be followed out farther, but the most serious of all is his extraordinary appetite,—his frightful voracity, some would call it; he eats all he gets, and asks for more, more food, more mental pabulum, more people to supply it, in a word *more professors*.

Nevertheless, the boy is strong and healthy, and looks cheerfully at the world, confident that things will be better when he is a man.

APPENDIX.

ON A ONE-SIDED TRAINING.

The following extract from the review of a book in "Nature" (the weekly Journal of Science, *par excellence*) of January 8th, 1891, p. 220, is deserving of attention:—

"It is not in the least an exaggeration to say that Prof. Woodward's idea of education is that every male in a community shall be a mechanic.

"He admits, it is true, a moderate amount of culture in literature and other branches, but exacts that three hours a day shall be given to drawing and manual labour, while with boys above fourteen it may be more. That is to say, three hours in school with two hours of home study are to be given to mathematics and book-keeping, science (*i. e.*, geography, zoology, botany, chemistry, physics, physiology) and literature (which is to include 'some choice specimens of modern prose and poetry'), and *one* foreign language—French, German, or Latin.

—"This" (says Nature) "*is a commendable education for a blacksmith.*"

—"The author quite forgets, that, absolutely necessary as it may be to educate the majority to become mechanics, the world requires a very respectable number of *professional, literary and really scientific men who could not be properly trained for such pursuits on one language.*"

[The italics are mine, A. J.]



