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## PRINCETON REVIEW.

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## No. I.

ART. I.—The Early Scottish Church; The Ecclesiastical History of Scotland from the First to the Twelfth century. By the Rev. Thomas McLauchlan, M. A., F. S. A. S. Edinburgh: T. & T. Clark. 1865.

Iona. By the Rev. W. LINDSAY ALEXANDER, D. D., F. S. S. A. Edinburgh.

LATE researches throw increased light upon the distinction between Celtic and Latin Christianity. They were separated by a boundary of facts, more enduring than the stone wall completed by Severus between the Solway and the Tyne, and warding off from Scotland both prelacy and papacy for more than a thousand years. There is reason to think that before the close of the second Christian century there were "Scots believing in Christ," and that for the gospel they were not indebted to missionaries from Rome. These Scots dwelt in Ireland as well as in Scotland, and there are historic intimations that they received their first Christian teachers from lands where the Greek language prevailed. It was perhaps three hundred years after Christianity dawned upon Scotland, when Ninian was commissioned by Rome as the primus Episcopus, "the first bishop to the Picts," and Palladius as "the first

ancient Culdee church. One thing is plain, that notwithstanding the claims of the Church of Rome, and its hierarchical organization to antiquity in Scotland, she can only claim four hundred of the eighteen hundred years that have elapsed since the planting of Christianity in the kingdom, viz., the period between 1150, when David established her, and 1550, when his establishment was overturned by the resuscitation of the old Scottish principles at the Reformation." (McLauchlan, pp. 420, 421, 440.)

- ART. II.—1. University Reform. An Address to the Alumni of Harvard at their Triennial Festival, July 19th, 1866. Printed in the Atlantic Monthly for September, 1866.
- 2. Review of Dr. Hedge's Address to the Alumni of Harvard: being Article V. of the New Englander for October, 1866.

THE former of these articles is by Dr. Hedge, as we understand, Dr. Frederic H. Hedge, Professor in Harvard Divinity School, the American editor of the famous "Essays and Reviews." It was delivered at the last annual commencement of Harvard College. Its immediate occasion was the new organization of the Board of Overseers of that institution. body concurrently with the corporation governs the college. What are the precise and distinctive prerogatives of each of these bodies we are not advised, nor is it important here to indicate. It appears, however, that great evils have arisen from the divided and often clashing jurisdiction of two Boards of Control, which all experience shows is far better concentrated in one, so insuring needful unity of action along with indubitable responsibility. The change in the membership of the Board of Overseers which gave rise to the special features of Dr. Hedge's address, amounts to a complete revolution. Hitherto they have been appointed by the State government. Hereafter, the legislature has directed that they shall be appointed by the Alumni who have been graduated for five years, giving their

votes according to certain prescribed forms, on commencement day, for candidates to fill such vacancies as shall from time to time occur. In a few years this will work a revolution in the membership of the Board. It was quite natural that Dr. Hedge, addressing the Alumni on the occasion of their investiture with this new power over the college, and consequent responsibility for its management, should improve the opportunity to call their attention to such reforms in its organization, government, and curriculum of study, as he deemed of most urgent necessity. This he has not failed to do. It is this part of his address-rather brilliant and sensational than profound or thorough-which makes it significant, and accounts for the attention it has awakened. The radical and sweeping innovations here boldly proposed by a professor in the oldest college of the country, on its annual festivity, to its future guardians, are too revolutionary in their bearing not only on that institution, but upon all our colleges, and the whole system of liberal education, to pass unchallenged.

The generally sound and judicious strictures on this address in the New Englander, which we have also noted at the head of this article, are from the pen of Dr. Woolsey, President of Yale College. They are a just exposure of some of the superficial yet plausible reasonings of Dr. Hedge, and a seasonable protest from high authority against these and like projects for disorganizing our great institutions for liberal education, destroying their discipline, and debasing their culture and training. Dr. Hedge's address is neither more nor less than a renewal, in an unexpected quarter, of the attempts periodically made to depreciate the utility and necessity of the study of the ancient classics, and the mathematics in our colleges; to urge the abolition of all compulsory courses of study, and enforced propriety of conduct, and, that the student be invested with the largest liberty in these respects; in short, to make him "master of the situation," so that he has only to consult his own pleasure as to what and how much he shall study, and generally as to his whole conduct and behaviour; the only restrictions being, that he must undergo a certain examination in order to obtain a degree, and that he is liable to removal from

the institution, if his influence prove incurably pernicious or his presence intolerable.

While it is wholly aside of our purpose to discuss the new organization of the Board of Overseers which has called forth the startling and revolutionary proposals of Dr. Hedge, we cannot refrain from turning the attention of our readers for a moment to the fact, that this address itself affords the first practical exemplification of its tendency and working. We find an appeal boldly made to the graduates to revolutionize the entire administration of the college as to government, discipline, studies; and to introduce a system, which, all versed in such matters know, would reduce our colleges to anarchy, and fill them, not with students, but with an ungovernable rabble of wild and idle youths. But it may be asked, what body of men may be more safely trusted with the disposal of such crude and empirical schemes than the mature graduates of our colleges? We answer, none whatever, if their deliberate and collective judgment can be fairly obtained, after due discussion. But how difficult to obtain this, on ordinary occasions, in any vote for overseers which may be given on commencement day? Are not the chances, that very few of the graduates will really cast their votes; that, in most cases, those who reside at a distance will know little of the relative fitness of different candidates for the post; that a few persons living in circumstances favourable to concert of action will really control the election; and that a little energetic and adroit management would enable those who have pet empirical reforms to promote, or personal and party interests to serve, to elect their candidates and carry their points, against the mature judgment of the great majority of graduates? While, therefore, we deem the interests of our colleges safe in the custody of their graduates, we object to this new system as being quite unlikely to secure that custody. We think it is obtained more completely and effectually through that single self-perpetuating Board of Trust and Control, to which the guardianship of our American colleges is generally confided, and which is usually composed of a majority of trusted and honoured graduates, with a wholesome infusion of other elements to give breadth to its plans, and shed corrective light on traditional errors and faults.

The changes advocated by Dr. Hedge are three, on each of which we propose to offer some comments. 1. The discontinuance of the present course of study of the Latin and Greek classics and of Mathematics in the collegiate curriculum. 2. Leaving to each student the choice of branches of study to be pursued by him unbiassed even by the stimulus of college honours. 3. The abolition of all laws, rules, rewards and penalties for regulating the actions, and securing the correct deportment and behaviour of the students.

1. In regard to the study of the ancient classics and the mathematics, Dr. Hedge says: (We give him the benefit of an extended statement in his own words:)

"The question has been newly agitated in these days, whether knowledge of Greek and Latin is a necessary part of polite education, and whether it should constitute one of the requirements of the academic course. It has seemed to me that those who take the affirmative in this discussion give undue weight to the literary argument, and not enough to the glossological. The literary argument fails to establish the supreme importance of a knowledge of these languages as a part of polite education.

"It is in vain to deny that those literatures have lost something of the relative value they once possessed, and which made it a literary necessity to study Greek and Latin for their sakes. The literary necessity is in a measure superseded by translations, which, though they may fail to communicate the aroma and the verbal felicities of the original, reproduce its form and substance. It is furthermore superseded by the rise of new literatures, and by introduction to those of other and elder lands.

"But, above all, the literary importance of Greek and Latin for the British and American scholar is greatly qualified by the richness and superiority of the English literature which has come into being since the Græcomania of the time of the Tudors, when court ladies of a morning, by way of amusement, read Plato's Dialogues in the original. If literary edification is the object intended in the study of those languages, that end is more easily and more effectually accomplished by a thorough acquaintance with English literature, than by the very imperfect knowledge which college exercises give of the classics"....

"The literary argument for enforced study of Greek and Latin in our day has not much weight. What I call the glossological argument has more. Every well-educated person should have a thorough understanding of his own language, and no one can thoroughly understand the English without some knowledge of languages which touch it so nearly as the Latin and the Greek. Some knowledge of those languages should constitute, I think, a condition of matriculation. But the further prosecution of them should not be obligatory on the student once matriculated, though every encouragement be given, and every facility afforded to those whose genius leans in that direction. The college should make ample provision for the study of ancient languages, and also for the study of the mathematics, but should not enforce those studies on minds that have no vocation for such pursuits. There is now and then a born philologer, one who studies language for its own sake,-studies it perhaps in the spirit of 'the scholar who regretted that he had not concentrated his life on the dative case.' There are also exceptional natures that delight in mathematics, minds whose young affections run to angles and logarithms, and with whom the computation of values is itself the chief value in life. The college should accommodate either bias, to the top of its bent, but should not enforce either with compulsory twist. It should not insist on making every alumnus a linguist or a mathematician. If mastery of dead languages is not an indispensable part of polite education, mathematical learning is still less so. Excessive acquirements in that department have not even the excuse of intellectual discipline. More important than mathematics to the general scholar is the knowledge of history, in which American scholars are so commonly deficient. More important is the knowledge of modern languages and of English literature. More important the knowledge of nature and art."

Against all this we protest as narrow and superficial, and all the more earnestly inasmuch as it is a voice *from*, (though we trust the issue will prove not of,) our oldest University, in which these studies have hitherto been supposed to be in high honour—a voice echoing that demand for empirical reform in high education which is wont to come from very different quarters, and, as

it seems to us, would sacrifice liberal culture to the behests of a blind and suicidal utilitarianism. For there is in the sphere of intellect as well as conscience, and of intellectual not less than moral training, a false and self-destructive utilitarianism wherein he that seeks his life shall lose it, and he that loses it, for an adequate object, shall find it. But leaving generalities, we proceed to specific heads.

1. We do not deem it necessary to the full strength of the argument for the continuance of the classics in the regular collegiate course, to dispute what Dr. Hedge claims in relation to their comparative literary value. Certainly the literary treasures of modern Christendom vastly surpass all that can be gathered from heathen antiquity. And yet we strongly dissent from his statement that the substance of ancient literature can be filtrated to us through translations. He concedes that the "aroma" is lost in this metamorphosis. This must needs be so, and has an importance which he quite overlooks. For to an extent that is not true of modern languages, the thought and language in the Latin and Greek classics are so interlaced that they cannot be separated from each other without tearing the skin from the flesh. To reproduce Homer, Virgil, Demosthenes, or Cicero, without their language, is not merely, as in translations of most of our modern authors, like reproducing the same man in a changed costume. It is like reproducing his skeleton only. The bald historical facts recorded in ancient literature may be, of course, stated in English. But the beauty and force, the keen discrimination, delicate wit, exquisite felicity which have given the literatures of Greece and Rome their matchless charms, wherever high education and elegant letters have been appreciated, of necessity evaporate in every attempt to translate them into modern tongues. They are inseparably inwrought into the very etymological, grammatical, and rhetorical idioms of these languages. The attempt to reproduce them, and to exhibit the classic products of Greece and Rome, in our vernacular, is like the attempt to bring before us the Roman soldier with Minie-rifle and other modern accoutrements, or to represent ancient domestic and social life through the customs and phrases in

relation to such matters which Christianity, modern civilization, steam, and electricity have naturalized.

2. Dr. Hedge allows much more weight to the "glossological argument." He thinks this may justify requiring a certain amount of Latin and Greek as a condition of admission to college, but not the enforced study of them afterwards, certainly not for any long time in the regular collegiate course. Notwithstanding this concession, we think he greatly underrates the force of this argument. He views it chiefly as an aid to the due understanding of our own tongue, of which the Latin and Greek, especially the former, are such large constituent elements. This is so essential an accomplishment, that liberally educated men cannot afford to despise it. And surely the present classical course in our colleges does not outrun the amount necessary to a due mastery of our own tongue. This, however, is but a slender part of the "glossological argument." Dr. Hedge thinks the time given to the classics might be better given to the modern languages. Among the many sufficient answers to this, one is well stated by Dr. Woolsey, "A good discipline under the ancient languages, especially under the Latin, places the acquisition of the modern, and above all, of the Romanic languages within a young person's easy reach. Suppose five years to be mainly devoted to the study of language; we have little doubt that if three of them are given to Latin and Greek, the three principal modern tongues of Romanic Europe can be learned as well in two years as they could have been in the five, if no acquaintance with Latin had preceded. And the reason of this lies in the superior discipline afforded by these languages of ancient times, more than in the fact that the vocabulary and grammar of the modern daughters of the Latin are to a considerable extent drawn from it. It is on the difference of thinking and expression between the old world and ours, that the greater discipline, the greater trial and exercise of the faculties in learning a language depends. The modern world in Christian lands thinks and writes very much in one way; even the Germans have modern minds, although their language is harder to acquire than those of most other European nations. The difficulties to be overcome in Latin thus smooth

the way afterwards, and the succeeding task of learning a language of modern times is rendered far easier."

3. But the far deeper reason for the thorough and enforced study of the Latin and Greek languages is quite ignored by Dr. Hedge, except in a casual witticism. We refer, of course, to the discipline and training of the intellect. Intelligent educators recognize this as the chief, while the imparting of information is a subordinate, though by no means unimportant, end of liberal education. In professional study or other subsequent culture, the other end of communicating knowledge in some department or specialty predominates, although it is not exclusive. In the study of law, medicine, or theology, a paramount object is to obtain knowledge in these several departments. But a secondary and by no means unessential aim is to train the mind to a special aptitude and facility for investigation and practice in these several professions. Indeed, collegiate education is therefore liberal, (liber,) in contra-distinction to that of Polytechnic, Commercial, Military, or Common Schools, because it is per se freed from bondage to the requirements of any particular occupation, or the necessities of obtaining a livelihood. Released from such servitude, it is left free (liber) to pursue its own training, development, culture, and enlargement exclusively. And none the less so, although the purpose be ultimately to use this increased intellectual power for the more successful pursuit of vocations that shall yield a living. Still this education is liberal, eminenter, because for the time being it is emancipated from all bonds except to the mind's elevation and enlargement. Here, too, we have the key to the reason why, by common consent of the cultivated world, the professions of law, medicine, and divinity, are par excellence styled liberal. Beyond all other employments, except those of high teaching and the pursuit of literature or science as a profession, they involve, in addition to labours directly aiming at a subsistence, the culture of the intellect and increase of knowledge as intrinsically good; the improvement of the mind, in short, as an end in itself, and not as a mere machine for getting a living. Hence, where they are properly pursued, they promise a dignity and honour, which largely offsets the pecuniary advantages

of merely money-getting pursuits, or of what the Germans call the "Bread and Butter Sciences," which bear directly on material production, and the means of sustenance or wealth.

Such then being the nature and aim of liberal education, the value of different studies is to be estimated preëminently by their power to discipline and invigorate the intellect. Preeminently, we say, but not exclusively. For besides invigorating the mind, it should undoubtedly be the aim of a liberal education so to inform students in regard to the great outlines and elements of the sciences, physical and metaphysical, and of the liberal arts, that they may know how to prosecute at greater length whichever of them they may afterward choose; that they may know what every educated man ought to be ashamed to remain ignorant of; that they may be opened to that breadth of view which is a chief end and distinctive mark of all liberal culture; and finally, that food may be furnished to the mind in order to its vigour and growth, since it cannot exercise itself without objects on which to act, and can only grow by what it feeds on. Giving all due weight to these considerations, it remains true, first, that the great end of a liberal education is the due training and discipline of the mind; and secondly, that the study of the ancient languages, up to the point of a fair knowledge of them, is an instrument of this discipline for which no substitute has yet been found. The same, in our judgment, is also true of mathematics, in the average extent to which the study of them is enforced in the great colleges of our country, though we do not undertake to say that it is not urged beyond necessity in any of them.

4. Beyond the sphere of the intuitive faculties, and the retentive, or memory, what remain are the discursive powers of mind, the powers of thought, which culminate in reasoning. Now it is not the purely intuitive faculties of sense-perception by which we cognize the outer world, and of consciousness by which we cognize the ongoings within us, that are the special objects of cultivation in liberal education. These are rather memory, whereby we retain what we acquire by intuition, or otherwise; and thought, through the discursive faculties, by which the mind passes from (discurrit) the material so furnished to other results worked out of them. In this process abstrac-

tion, generalization, judgment, reasoning, constructive imagination are variously involved. These are the powers of thought, of intellectual discursion or discourse. Reasoning interpenetrates and supports them all. Or to reach the generic quality of them all, of which reasoning itself is a species, comparison—for, as Hamilton shows, they are all forms of comparison.

Now in regard to this reasoning by comparison, it is of two kinds-demonstrative, and moral or probable, according as it deals with necessary or contingent truth. The former is the ultimate standard, the perfect form, and normal type of all reasoning. Other reasoning becomes cogent and conclusive just in proportion as it approximates to this, or as we eliminate those elements whereby it comes short of this. Hence great educators, with rare exceptions, have incorporated a somewhat extended course of mathematics, as a fundamental part of liberal education, an indispensable mental gymnastic. How far, for these purposes, it is necessary to go into transcendental mathematics; how far it is needful to go beyond algebra and geometry, pure and applied, into the deeper intricacies of the calculus, in order to tone up the mind by adequate exercise in demonstrative reasoning, is thus far an open question. We care not to pronounce upon it. In deciding this, as well as the entire place of mathematics in liberal education, some other points must not be overlooked. They make great demands upon the powers of abstraction, attention, memory, especially logical memory. Probably nothing more tasks and invigorates the power of attention than difficult mathematical problems and demonstrations—and this too upon subjects the most abstract. And continuous persistent attention is but another name for mental application, or effective study, which is at once the measure and the synonyme of intellectual power. In this power, perhaps more than in any thing else, lies the secret of intellectual might, we were about to say, of genius itself, which is but a power of intense mental activity, in some given direction. Sir Isaac Newton is reputed to have said that if there was aught in which his mind surpassed that of ordinary men, it was this power of unremitting attention.

Another important power cultivated in the study of mathe-

matics is what we may call the tentative power, required in framing those hypotheses and inventing those experiments, which are so requisite in all investigations for the discovery of truth whether scientific or historical. This habit is constantly cultivated in forming conjectures, considering possibilities, devising processes for the solution of problems and the demonstration of theorems. Thus they become not only a calculus employed in the investigations of physical science, but a propaideutic for the tentative processes by which its discoveries are made. And, as dealing with formal and necessary matter, they are more especially a propaideutic for the study of other sciences of formal and necessary truth, such as logic and elementary metaphysics.

And yet pure mathematics yield only formal truth, which as formal is also necessary. But they do not of themselves give any content of actual being. They only prove truths of actual being hypothetically, i. e., upon hypothesis of any facts thereof, otherwise evinced, furnishing the conditions to which they apply; hence, with logic, sometimes called hypothetical sciences. That is, they do not of themselves prove the first original fact of actual being. They may prove that  $12 \times 12 =$ 144, or that one side and the angles of a triangle being given, the other sides can certainly be deduced therefrom. But this does not prove any fact of actual being. If, however, it be otherwise proved that there are 12 garments, each worth 12 dollars, mathematics show their total value to be 144 dollars. Given from observation the horizontal distance from the base of a steeple to a certain point, and the angle formed by this line and another from the same point to the top of the steeple, and you can calculate its height. Without the data thus obtained from other sources, mathematics evince no truths of actual being. But it is mainly with facts of actual being that we have to do. On these we are called chiefly to exercise our reasoning faculties, and this in the methods of moral or probable reasoning. Hence it is of transcendent importance that the mind of the student receive the most complete drill in this kind, a drill which can only be given in any sufficient degree by the established curriculum of study in the Greek and Roman classics. This will appear more fully if we consider,

5. The special tasking of the reasoning powers which is involved in making out the meaning and the grammatical construction of the text of Latin and Greek authors. It is one continual process of finding premises and deriving conclusions from them. The various points as to gender, number, person, case, tense, the categorical, conditional, imperative force signified by the varied endings of words; the syntactical laws which must be harmonized with these endings; the necessity of conforming the meaning to the syntax and the syntax to the meaning, and both to known facts, and of ascertaining historical facts in order to find a key to each; the constant framing and testing of different hypotheses, as to the meaning and construction of sentences: the balancing of considerations often drawn from various aspects of the case; the filling out of elliptical passages; this followed up, as less difficult authors are mastered to those of greater complexity and obscurity, constantly and manifoldly tasks the attention, the discrimination, the invention, the application of logic, as no other exercises equally feasible at this stage of education can do. This discipline is invaluable. Nor can its loss be compensated.

It is no sufficient answer to this, to say that the same results may be achieved by studying the modern languages. Aside from obvious grammatical peculiarities which give the Latin and Greek a high vantage-ground in this respect, President Woolsey, in a passage already quoted, urges another fact with great force and conclusiveness, when he says, "it is on the difference of thinking and expression between the old world and ours, that the greater discipline, the greater trial and exercise of the facultics depends. The modern world in Christian lands thinks and acts very much in one way; even the Germans have modern minds, although their language is harder to acquire than those of most other European nations. The difficulties to be overcome in Latin thus smooth the way afterwards." Of this no one can doubt who has tried them.

It is indeed an evil valde deflendus, that this admirable discipline is now so greatly demoralized and thwarted, by the present nearly universal use of cheap translations in our colleges. Translations indeed might be used with great benefit, if the student would refuse to resort to them till he had exhausted

his own powers in solving difficulties and eliciting the meaning and construction. This, however, is too much to expect of the mass of immature and inconsiderate youth. Indolence has temptations which are immediate and urgent. The utility of the discipline resulting from faithful and thorough study is remote and not readily appreciated by the immature, when blinded by a seductive love of ease.

For this evil there is but one remedy. It is to be found in the skill and persistent fidelity of the teacher. He can find out methods of counteracting and thwarting the mischiefs of the reckless use of translations. He can work his pupils in such lines of questioning, that the illegitimate use of these helps, so far from saving labour to the student, shall only embarrass him in his recitations. No chairs in our colleges to ught to be filled with more able and accomplished teachers. The cause under consideration necessitates, if not more scholarship and learning, more tact and fidelity in teaching, on the part of our classical professors, than formerly. The time has gone by when it will do to presume, as has so often been done, that almost any respectable college graduate will answer well enough to teach Latin or Greek. To teach them effectively, so as to neutralize this destructive agency, requires the highest measure of that knowledge, ability, fidelity, and tact which are the great requisites to all successful teaching. We ourselves passed through a college second to none in the land, in name and numbers, in which a single tutor taught all the Latin, Greek, and Mathematics, and, with slight exceptions, every thing else up to senior year. Of course there was very little real teaching or attempting to teach. He was little beyond a sort of sentinel or orderly, to see that his pupils attended and recited. Yet they made decided progress, because they were obliged to work out their lessons by grammar and lexicon, being in blissful ignorance of all translations but Smart's Horace, and their emulation quite sufficed to raise a recognized standard of excellence, irrespective of the tutor who never took the trouble to parse them. The day is past when that or any college could live on such a basis. The "ponies" would run them down.

6. Another great advantage of classical study lies in the

constant exercise in the necessary forms of thought, and in the elementary truths of logic and metaphysics which it affords. Language is the vehicle of thought; the articulate embodiment of human consciousness, and of the truths, ideas, the forms, processes, and results of thinking, which are grasped by or have place in that consciousness. Grammar is but the logic of language. It is constantly dealing with subject, predicate, copula, the quantity and quality of propositions, the categorical and hypothetical force of sentences; the relations of actions or events to time and space, of substance and accident, of cause and effect. The causative, attributive, disjunctive, conditional force of particles and inflexions, especially the multitudinous and subtle distinctions indicated by the different parts of the Greek verb, and the connective particles between sentences which form the hooks and eyes of thought-all this and much more the like, show what an admirable discipline for logic and metaphysics is found in high and thorough classical study. To the allegation that the study of modern or other languages will do this as well as Latin and Greek-we answer, first as before, that the difference between ancient and present modes of thought renders the ancient languages far more serviceable for this purpose, by enforcing attention to all the ideas and forms of thought implied in grammatical construction, in order to detect their meaning. Second, That the structure of these languages and their terminal paradigms is peculiarly fitted to fasten the student's mind on such points, and to work it into the apprehension of them.

7. In Christendom it is still the custom in all the departments of science, letters, and the liberal arts, to borrow the technical nomenclature from the Latin and Greek. This is not only true of the liberal professions, law, medicine, and theology, but it is true of the sciences, physical and metaphysical, and of the fine arts. An examination of the very names of these several departments generally, and of their subordinate divisions, however minutely carried out, will show the vast reach of this remark. This being so, a knowledge of the languages which furnish this terminology, must greatly aid the understanding of it; and this not only in one's own profession, department, or specialty, but in the whole range of

science and liberal study beyond his own particular vocation. This is one reason why the study of these languages has been deemed so essential a part of liberal education. By a sort of tacit and instinctive consent the new terms required by the advance of philosophy and science, pure and applied, are, with slight exceptions, in the cultivated nations, taken from the Greek and Latin. Thus they become the common property of the republic of letters through the nations, and down the ages; a great link in the commune vinculum, which infusing a common element into the language of the literary and scientific world, binds all its members together in closest brotherhood. To all this may be added the fact that the New Testament, the charter of our common Christianity, and the great spring of modern civilization, is given to us in Greek, while the early Christian literature, and the primitive discussions of Christian doctrine were written in Greck and Latin; and nearly all the great treatises on theology from Augustine until the post-reformation period, have come down to us in Latin. The great principles of civil law too, which the Romans first systematized, find their roots and elementary formulas in the original and later Latin treatises in which they were developed. In these aspects, therefore, the "glossological argument" for the study of the ancient classics, named by Dr. Hedge, is greatly amplified and strongthened. Indeed the very term "glossological" is quite an illustration of what has just been said.

8. There is another view of this subject, in part "glossological," that ought not to be overlooked. Among those studies of language that exert the highest educating power is to be ranked that which traces the original and derivative meanings of words. Some professors of rhetoric begin with Trench on Words, deeming such studies of the greatest value as a foundation of rhetorical training. But it is clear that the study of words in their original meaning and its subsequent modifications, is among the most powerful educators of the mind. These changes and variations in the meaning of words are but the articulations of similar processes of thought, and of the relations therein involved, even as the growth of language, alike in copiousness of words, and variety in

their meaning, is but an exponent of the growth of thought. The various meanings developed out of the radical primitive import of a word, are founded on analogy, or the relations of genus and species, or historical circumstances which, as related to the word, are most instructive, or other things the like. To study words through all these changes and ramifications of their meaning, is to thread some of the most subtle distinctions and refinings of human thought; the most important logical relations and analogies—in a word, the normal workings and unfoldings of the human intellect. Hence it is a grand educating power.

But it may and will be said, that all this can be accomplished by the study of words in our own language. To this we answer, first, that the most important part of the vocabulary of the English and other principal modern tongues is taken from the Latin and Greek, and therefore cannot be historically traced as to its origin and development except through those languages. Take any half-dozen of these words, say, conscription, project, traduce, baptism, sacrament, paradise, melancholy, and how clearly does this appear. Secondly, it is only in the necessities involved in finding the meaning of ancient writers, that the degree of attention to these various significations of words can be ordinarily secured in the case of young students, which will give them the full disciplinary benefit of this sort of philological study. What a prodigious knowledge and educational training are given in a thorough mastery of the different meanings, and their mutual relations, of the words ratio in Latin, and λογος in Greek; and this too as they come down into modern languages, single or compounded with other words!

Finally, this leads us to say a word of the relations of these studies to history, with which Dr. Hedge thinks most students might more profitably employ their time. Histories, by modern authors, of Greece and Rome, are instructive, and do much to reproduce their life before us. Yet there is no reproduction so real and life-like as in the representations, thoughts, reasonings, narratives, poems, and speeches of their own authors, in their own language. In fact Greece and Rome cannot be duly mirrored to us except through the languages

thereof. These are the most signal achievements of those nations, and the most characteristic outbreathings of their life. Moreover, in the study of these languages, large portions of their history, if not directly brought before the student in the authors he reads, must be found out by him and graven on his mind in order to any due understanding and exegesis, and so any proper translation of what he reads.

But above all, it is only by some knowledge of the ancient classics that the contrast between Christian and ante Christian history can be understood. They show us the utmost that human nature could achieve in morals and religion without a Divine revelation and without Christianity, in a state of intellectual cultivation and polish, which have made their works, to a large extent, literary models to succeeding nations. So we are prepared to judge aright of Christian history; and to determine what in the condition and achievements of the Christian nations is due to Christianity. Here we cannot do better than quote Dr. Woolsey.

"Another thing worthy to be taken into account is, that the study of the ancient languages forms a connection in the mind of the students, between the ancient and the modern periods. The mathematical sciences have no connection with the world at all. The physical and natural, with the exception of geology, contain almost nothing of a historical character. We need for the highest purposes of life, for instance, that we may be in a condition to judge of the evidences of religion and to understand its nature the better, to come into contact with antiquity, to be able to estimate its spirit, its wants, its actual civilization, to know something of the world before Christ, and the world without Christ. Not only is the key to this furnished by ancient literature, but the study of the works of those ages creates a conception in our minds of the state and progress of mankind which is of use for our culture in the highest sense. Not only is the judgment exercised by the continual habit of estimating probabilities in the combinations of words and of sentences, but the world itself opens to our eyes and becomes more apprehensible; we can trace its plan better, and see a Providence working out its redemption."

Let us now attend to Dr. Hedge's argument for leaving

the studies and behaviour of the student wholly to his own option.

"I venture to suggest that the time has come when this whole system of coercion might, with safety and profit, be done away. Abolish, I would say, your whole system of marks, and college rank, and compulsory tasks. I anticipate an objection drawn from the real or supposed danger of abandoning to their own devices and optional employment boys of the average age of college students. In answer, I say, advance that average by fixing a limit of admissible age. Advance the qualifications for admission; make them equal to the studies of the Freshman year, and reduce the college career from four years to three; or else make the Freshman year a year of probation, and its closing examination the condition of full matriculation. Only give the young men, when once a sufficient foundation has been laid, and the rudiments acquired, the freedom of a true University,-freedom to select their own studies and their own teachers, from such material and such personnel as the place affords.

"The rudiments of knowledge may be instilled by compulsory tasks; but to form the scholar, to really educate the man, there should intervene between the years of compulsory study and the active duties of life a season of comparative leisure. By leisure I mean, not cessation of activity, but self-determined activity,—command of one's time for voluntary study.

"There are two things which unless a university can give, it fails of its legitimate end. One is opportunity, the other inspiration. But opportunity is marred, not made, and inspiration quenched, not kindled, by coercion. Few, I suspect, in recent years, have had the love of knowledge awakened by their college life at Harvard,—more often quenched by the rivalries and penalties with which learning here is associated. Give the student, first of all, opportunity; place before him the best apparatus of instruction; tempt him with the best of teachers and books; lead him to the fountains of intellectual life. His use of those fountains must depend on himself. There is a homely proverb touching the impossibility of compelling a horse to drink, which applies to human animals and intellectual draughts as well. The student has been defined by

a German pedagogue as an animal that cannot be forced, but must be persuaded. If, beside opportunity, the college can furnish also the inspiration which shall make opportunity precious and fruitful, its work is accomplished. The college that fulfils these two conditions—opportunity and inspiration—will be a success, will draw to itself the frequency of youth, the patronage of wealth, the consensus of all the good. Such a university, and no other, will be a power in the land.

"Nothing so fatal to inspiration as excessive legislation. It creates two parties, the governors and the governed, with efforts and interests mutually opposed; the governors seeking to establish an artificial order, the governed bent on maintaining their natural liberty. I need not ask you, Alumni, if these two parties exist at Cambridge. They have always existed within the memory of 'the oldest graduate.'

"Professors should not be responsible for the manners of students, beyond the legitimate operation of their personal influence. There should be no penalty but that of expulsion, and that only in the way of self-defence against positively noxious and dangerous members. Let the civil law take care of civil offences."

We cannot restrain our astonishment, to say no more, at language like this from the Professor of Ecclesiastical History in Harvard College. It is little better than an ad captandum appeal to the undisciplined feelings and ignorant inexperience of youth, against the control and guidance which are essential to their proper training and education. We favour, to the utmost, all possible advancement in the preparation for entering college. What can be done before entering, makes so much room to do more after entering. We should be glad to have Freshmen begin where they now end, and to gain a whole year in preparation for after-work. But such changes, as all know, are the work of time. Still, suppose this done. Take our American students as they are at the beginning of Sophomore, or even Junior, nay, Senior year; what qualifications have they to select and lay out the course of study most needful for them? What knowledge have they, or in nine cases out of ten, their parents, that fits them for such an office? And if they had this requisite, how could we rely upon volatile youth at

that age, voluntarily to take upon themselves the toil and selfdenial required to carry it out? Is it not quite certain that in most cases, this election of studies would rather be of what is most pleasant, than of what is most needful? just as so much of their voluntary reading is apt, until they are duly trained, to turn more to light and amusing books than to the Novum Organum or the Paradise Lost, or the great essayists, poets, historians, and philosophers? They will take to those departments for which they have the greatest aptitude, in which their minds energize with greatest facility—not those in which they are most feeble and deficient, and which most need bracing, in order to that due balance and symmetry of mental development which is one great end of liberal, as preparatory to professional education. True, indeed, Dr. Hedge advises, that in regard to "born philologers," and "exceptional natures that delight in mathematics," "the college should accommodate either bias, to the top of its bent, but should not enforce either with com pulsory twist."

We apprehend that this proceeds upon a radical misconception of the whole aim and end of a liberal education. One chief object of it is to substitute a broad for a narrow and onesided culture: to prepare men to pursue their respective specialties at a later period, when they are mature enough to choose them intelligently, not only with greater power on account of their augmented intellectual vigour, but with some security against that extreme contraction of the mind upon single points, which would give a "life to the study of the dative case," or "find its chief value in the calculation of values." Even professional linguists and mathematicians see all the better through their respective departments, for having some outlook beyond them. He knows best his own home and its value who has taken some surveys beyond it. Doubtless he who works only at the point of a pin will gain amazing expertness therein, but it is in that which has "neither length nor breadth." Men who have no part of their nature developed beyond some single special bent or bias, become, in a sort, intellectual monsters, and unless education does something to correct the abnormity, they grow to be the pedants and bores of literary society, the terror of scholars and gentlemen.

As to this picking and choosing of studies, there is but a very narrow range that can properly be left to the discretion of the student during his college course, simply because he wants the knowledge and judgment requisite for a proper selection. Perhaps a small range of option may be wisely allowed toward the end of the college course, in which the student may elect studies bearing more, in preference to those bearing less, on his future course. In the main, however, his course must be determined for him, if his college career, in ordinary cases, is to be of much value to him. And not only so, his professional course must also be marked out by those wiser and more experienced than himself. This is involved in the very idea of professional schools. They not only afford competent teachers, but fix the course of study, so that the student's efforts may be rendered most effective in preparing him for his work. Here too, though far less than in college, a certain measure, if not of "coercion," yet of enforced courses of study and propriety of conduct comes in. All this, of course, admits of such side reading or study, outside of the regular curriculum, whether in the college or professional school, or in the interval between them, or after leaving the latter, as his opportunities and inclinations may lead him to pursue.

Aside from this insuperable objection to placing the course of study at the option of the student, President Woolsey suggests another at present scarcely less so. It would require a number of professors far beyond the present scholarship of the country, and an amount of endowments vastly beyond the present reach of even our older colleges. Of competent professors even within the present average curriculum, there is no surplus. Such an indefinite extension of the possible courses for the student, as would suit the fancies of all sorts of them, or make any approximation to the standard of a proper university, would require hosts of professors in different departments not now attainable, even if the funds were at hand to sustain them.

In reality, however, the best preparation for special courses of study is a liberal education in the true meaning of the term. It has been supposed that our schools of applied science could dispense with a liberal education in their pupils. And

so they can. But some of the ablest professors in those schools have borne their testimony that, as a class, those of their pupils who had enjoyed a regular classical and collegiate education were vastly more susceptible than others to their teachings. This will surely be the testimony of the teachers of law, medicine, and theology. And none the less so, although, in rare instances, men, by the sheer force of eminent natural gifts, attain the highest eminence in these several professions without such advantages. All this we believe to be corroborated by the experience of those institutions that have allowed, to such as desire it, a partial and self-selected course of study, whether with or without the privilege of a regular degree. As a whole, we think it will be conceded that the results with this class of students do not tell much in favour of attempts at high education through courses of study determined by the choice of the student.

Before proceeding to the consideration of the last reform proposed by Dr. Hedge, the abolition of all college laws regulating the conduct, we will call attention to one great principle, apparently overlooked by him, which underlies this whole subject, both of prescribed and enforced courses of study and rules of conduct, one withal which, in our judgment, decides the controversy regarding them, in its main issue, if not in its details. It is a familiar fact, that the first studies in most departments, are in various degrees, uninviting, mechanical, arduous, imposing all the pains of toil with little if any of the pleasures of insight. The rudiments of the sciences therefore, the first front presented by them to the student are apt to be, like those of the alphabet and rudimentary grammar in language, unwelcome and forbidding. It is only after the elementary principles have been mastered by dry and severe study, that the pleasures of insight supervene, and the pangs of intellectual travail at length bring to the birth the "rapturous eureka." The pleasure, the "inspiration" of study in any department, therefore, whatever the ability of the professor, or the inspiring power of his teachings, depend largely on a preliminary toilsome and painful effort, which the young student is sorely tempted to avoid, and generally will avoid if possible, unless some powerful extrinsic motive is supplied to him. He

is therefore in no condition to be safely left to his own choice as to what he shall study, or the manner and degree of diligence with which he shall study. How repulsive, for example, do the first exercise in the syllogism, and in metaphysics, often appear to those, who, after having been induced by sufficient motives, and under vigorous teaching, to toil upon them up to the point of facile insight, sport themselves in threading the tricks of "illicit process," arguing in a circle, fallacia accidentis, or in impaling adversaries on the horns of a dilemma? or at length luxuriate in questions of realism, idealism, and materialism, of cause and substance, of monism and pantheism, which have tasked Plato and Aristotle, Kant and Hamilton.

Abolish, says Dr. Hedge, "your whole system of marks, and college rank, and compulsory tasks." What is wanted is, first, opportunity, then inspiration. "But opportunity is marred, not made, and inspiration quenched, not kindled by coercion." This is well enough in the abstract, but in its present application it is shallow and one-sided, to say no more. We deem it enough, after what has already been said, to oppose to it the reasoning and authority of one of the mightiest minds and successful educators of this or any age. Says Sir William Hamilton in closing his introductory lecture on Metaphysics:

"The primary duty of a teacher of philosophy is to take care that the student does actually perform for himself the necessary process. In the first place, he must discover, by examination, whether his instructions have been effective,—whether they have enabled the pupil to go through the intellectual operation; and, if not, it behooves him to supply what is wanting,—to clear up what has been misunderstood. In this view, examinations are of high importance to a professor; for without such a medium between the teacher and the taught, he can never adequately accommodate the character of his instruction to the capacity of his pupils.

"But, in the second place, besides placing his pupil in a condition to perform the necessary process, the instructor ought to do what in him lies to determine the pupil's will to the performance. But how is this to be effected? Only by rendering

the effort more pleasurable than its omission. But every effort is at first difficult,—consequently irksome. The ultimate benefit it promises is dim and remote, while the pupil is often of an age at which present pleasure is more persuasive than future good. The pain of the exertion must, therefore, be overcome by associating with it a still higher pleasure. This can only be effected by enlisting some passion in the cause of improvement. We must awaken emulation, and allow its gratification only through a course of vigorous exertion. Some rigorists, I am aware, would prescribe, on moral and religious grounds, the employment of the passions in education; but such a view is at once false and dangerous. The affections are the work of God; they are not radically evil; they are given us for useful purposes, and are, therefore, not superfluous. It is their abuse that is alone reprehensible. In truth, however, there is no alternative. In youth passion is preponderant. There is then a redundant amount of energy which must be expended; and this, if it find not an outlet through one affection, is sure to find it through another. The aim of education is thus to employ for good those impulses which would otherwise be turned to evil. The passions are never neutral; they are either the best allies, or the worst opponents, of improvement. 'Man's nature,' says Bacon, 'runs either to herbs or weeds; therefore let him seasonably water the one, and destroy the other.' Without the stimulus of emulation, what can education accomplish? The love of abstract knowledge, and the habit of application, are still unformed, and if emulation intervene not, the course by which these are acquired is, from a strenuous and cheerful energy, reduced to an inanimate and dreary effort; and this, too, at an age when pleasure is allpowerful, and impulse predominant over reason. The result is manifest." Again, in note A of the Appendix to the American edition of his Metaphysics, he uses the following emphatic language-"Nothing, therefore, could betray a greater ignorance of human nature, or a greater negligence in employing the most efficient means within its grasp, than for any seminary of education to leave unapplied these great promotive principles of activity, and to take for granted that its pupils would act precisely as they ought, though left with every inducement strong against, and without any sufficient motive in favour of exertion."

This disposes of a large part of the argument against compulsory regulations, not only as respects studies, but conduct. We are quite ready to let the civil law take effect against its violators, and do what it may in preventing disorderly outbreaks among students. This, however, might do its utmost, and leave the whole life and manners of our colleges in a state so anarchical as to counter-work, if not utterly frustrate, the best efforts of the best professors and best students. Indecorum and disorder in public exercises, academical and religious, are destructive and ruinous to the full extent of their prevalence. They must be prevented by adequate regulations. Some order and decency of deportment must be insisted on at all times and places—especially the avoidance of whatever interferes with study during the hours of study, and with due attention to recitations and lectures while they are going on. Surely our academic groves must not be allowed to degenerate into menageries. To forego all rules and restraints in such matters is really to put the college, its teachers and meritorious students, at the mercy, or rather under the despotism, of the indolent, heedless, mischievous, and vicious members. This would be a deadly blow to education, and a great injustice to all parties. We would go all lengths with the reformers in reducing the · number of rules and regulations to the fewest possible, consistent with the paramount end of order, which is the condition of all other good in a college. But this we would not forego at the bidding of any theorizers or reformers.

But the cry is for liberty as the condition of powerful, delighted, successful intellectual activity. There can be no inspiration without liberty. So be it—only let it not be supposed that liberty and law within due limits are incompatible. They are rather mutual complements and supports, in the family, the state, the church, the school, the college, in all sound intellectual and moral training and growth. Even liberty supposes a "law of liberty." Lawlessness is the negation of all genuine freedom—nowhere more than in a college, where the unrestrained licentiousness of the bad is a fatal tyranny over the good: nowhere more than in intellectual

growth, in which the tastes of the young, if unregulated, will run to wild self-indulgence, instead of that wholesome discipline which developes a strong, symmetrical, efficient intellect, that, from first mastering itself, is prepared to master whatever it is called to deal with.

In regard to college, as all other governments, we greatly crave for it the divine art of governing enough without governing too much, and of so governing the student that he shall seem to himself to act of his own choice or spontaneity, rather than under the pressure of an extrinsic authority; that the power without and that within shall be consentaneous, without conscious clashing, like the union of the centrifugal and centripetal forces in harmonious action. So order, and decorum, and diligence are secured, let there be the smallest burden possible of minute rules and irritating exactions.

But, we are told, professors should not be responsible for the morals of students beyond the legitimate sphere of their personal influence. This, like most of the specious utterances from this quarter, is a half-truth, all the more dangerous for want of its complementary counterpart. Professors are bound of course to exert whatever personal influence they can in favour of morality and religion among the students. But still further, the guardians of a college in their collective and authoritative capacity are bound to prohibit, and as far as possible repress, practices which are not only injurious to the offender, but contaminating to his associates, and demoralizing to the college: such as gambling, profaneness, drinking of intoxicating liquors, licentiousness, &c. Within certain limits, during this susceptible period of life, while the student, yet a youth, is withdrawn from parental inspection and domestic influence, the college faculty is in loco parentis, and certainly owe it to those who confide sons to their care to do what they can to check vice, exorcise contaminating influences, and put forth a positive and active Christian influence. We will not undertake to say, having no present means of knowledge, what may be the case of Harvard, with its large numbers of opulent youth, its nearness to a great city, and its "broad" religion. But we do say, in regard to the better class of Christian colleges within our acquaintance, that, with all their defects, they furnish the

most safe and hopeful places of resort for youth. The proofs of this, presented in a former article, we cannot now stop to repeat.\*

Dr. Hedge even would sanction expulsion of dangerous students. This, of course, will apply to infamous crimes and vices which are both pestilent and incorrigible. Suppose, however, that the student has not reached this pass, but nevertheless shows an idleness, heedlessness, a drift towards vice and disorder which tend this way, threaten such a consummation. and withal are alike injurious to himself and his fellow-students; are no reprimands, penalties, or rewards, to be plied to prevent his sinking to ruin and incurring the brand of EXPULSION? This is the extreme penalty of college laws. can inflict no civil or corporeal pains or punishments. All milder punishments, while, if ineffectual, they prepare the way to it, yet are designed to save from the need of it, and often with the happiest effect. They are of the nature of warnings, lowering of rank, suspension, informing parents-in short, reformatory and corrective, not destructive. Shall these be abolished? Believe it who will.

In closing this discussion we scarcely need remark, that we shall zealously espouse all real reforms and improvements in the organization and administration of our great institutions of liberal education. We think there is room for progress in all of which we have any knowledge, and that such as stubbornly set themselves against healthy advancement must inevitably be retrograde. Nothing of life can long be stationary, without suffering stagnation. But reformation is not destruction—the issue to which this new project of college reconstruction seems to invite us.

Before dropping our pen, we take occasion to say that the greatest requisite to advancement in our colleges is the increase of facilities and incentives to a more thorough preparation for entering them; and this for the present not so much in the extent of ground gone over, as the style and thoroughness of fitting; the honest bona fide mastery, by means of grammar and dictionary, of the books now required to be read for admis-

<sup>\*</sup> See Article on Religion and Colleges, January, 1859.

sion to college. There is no lack of schemes for new colleges. He who should elevate those we now have, by founding and endowing a first class preparatory school, not far from each or any one of them, having the excellencies without the faults of the schools of England, would embrace an opportunity which is rarely offered, for doing an inestimable service to the church and country, to this generation and to posterity.

ART. III.—The Twenty-ninth Annual Report of the Board of Foreign Missions of the Presbyterian Church in the United States of America. New York. 1866.

WE observe several references in this Report to the want of missionaries. The same want is felt by most missionary institutions. We have seen with regret, in the public press, that the oldest of our missionary Boards reports a diminished number of missionaries, and but one new labourer sent out last year to the foreign field. Clearly more men should be sent out, and in seeking these men the first duty of all is that of prayer to the Lord of the harvest, that he would send them forth. No missionaries of any worth will be obtained except in answer to the prayers of the church, yet this axiom does not preclude the use of suitable means of obtaining them, nor the consideration of those second causes which affect their number, qualifications, and usefulness.

The idea of giving the gospel to the heathen is from Heaven, inspired in the hearts of men by Divine grace. In its development, like most things that endure, this idea takes the form of growth; it is not like a house built, or a machine made, but a seed planted, which springs up and grows. As a growth, its progress will be varied and subject to modifying causes; so a plant is affected by soil, climate, and culture. The growth of the idea of missions differs in each denomination of Christians, but all Protestant churches agree in their view of the object of the missionary enterprise. Their differing means of promoting this object depend on their doctrinal belief, and their opinions