

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
- Pages damaged/
Pages endommagées
- Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- Pages detached/
Pages détachées
- Showthrough/
Transparence
- Quality of print varies/
Qualité inégale de l'impression
- Continuous pagination/
Pagination continue
- Includes index(es)/
Comprend un (des) index
- Title on header taken from:/
Le titre de l'en-tête provient:
- Title page of issue/
Page de titre de la livraison
- Caption of issue/
Titre de départ de la livraison
- Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X

4755
327

THE CANADA EDUCATIONAL
MONTHLY.

THE CANADA

824
—

EDUCATIONAL MONTHLY

EDITED BY ARCHIBALD MACMURCHY, M.A.

VOL. XXI.

JANUARY TO DECEMBER.

1898.

TORONTO:

THE CANADA EDUCATIONAL MONTHLY PUBLISHING COMPANY.

Contents.

Alaska	<i>Frances M. Perry</i>	13
Algebra		369
Astronomy Notes	<i>Thomas Lindsay</i>	279, 319, 360
Birds		302
British Empire To-day—New Zealand, The	<i>Principal G. M. Grant</i>	205
Character and School Education	<i>Supt. C. B. Gilbert</i>	48
Composition and Rhetoric	<i>Harvard Committee</i>	19
Contemporary Literature	38, 74, 119, 159, 199,	240
Co-operation in Education	<i>J. L. Richards, LL.D.</i>	261
Correspondence	37, 155,	236
Corporal Punishment	<i>Prof. Earle Barnes</i>	133
Current Events and Comments	28, 65, 108, 145, 189, 220, 272, 317,	353
Dr. Harrison's Address at the Teachers' Institute		260
Early Impressions as a Teacher	<i>Maud Pettit</i>	281
Economy in High Wages for Teachers	<i>John Davidson</i>	81
Editorial Notes	25, 61, 98, 140, 179, 211, 268, 311,	34
Education as an Aid to Labour	<i>E. R. Davey, LL.B.</i>	6
Educational Association at Halifax, The		241
Encœnia of the University of New Brunswick		254
Examinations	<i>Rev. Canon Evan Daniel, M.A</i>	137
Feeling as a Factor in Education	<i>Dr. B. A. Hinsdale</i>	264
First Gill City School, The		210
Genesis of Geometry in the Race	<i>Benchara Branford</i>	291, 339
Good Citizens	<i>Fidelis</i>	16
Grave Tree, The	<i>Bliss Carman</i>	311
Language Teaching	<i>H. Courthope Bowen, M.A.</i>	88
Latin Pronunciation	<i>Robert M. Harper</i>	54
Life	<i>Rev. Prebendary Harry Jones</i>	288
Life is Struggle	<i>A. H. Clough</i>	347
Magazine and Book Reviews	277, 319,	357
Moral Training in Public Schools	<i>Prof. J. G. Hume</i>	161

Contents.

National or Central Bureau of Education for Canada.....	<i>Dr. Harper</i> 304
Neuhof Experience, The.....	<i>Dr. J. M. Harper</i> 176
Notes on Burns.....	<i>Rev. Prof. Clark</i> 201
Notes and Comments.....	314
Old Order Changeth, The.....	345
Opportunity of the Girls' Private Schools, The.....	59
Our Native Maples.....	<i>Elta M. Powers</i> 300
Over-Study.....	<i>Hon. G. W. Ross</i> 251
Plea for the Better Teaching of Manners.....	<i>Florence Bell</i> 328
Poets of Old Israel, The.....	24
Prince Edward Island Teachers' Convention.....	<i>Inspector G. J. McCormac</i> 344
Public Libraries in Canada.....	<i>James Bain</i> 41
Public School Leaving Examinations, The.....	<i>Ernest Coombs</i> 286
Religious Instruction in American Schools.....	<i>Pres. Levi Seely</i> 125, 167
School Work.....	32, 70, 117, 152, 197, 325
Scottish Teacher in New York, A.....	247
Secure Hold of Education, The.....	<i>Evening Post</i> 32
Sermon by the Archbishop of Canterbury.....	121
State Text Books.....	21
Superintendent Greenwood's Annual Address.....	321
Teachers' Commission, The.....	<i>W. A. McIntyre</i> 170
Teacher and His Times, The.....	96
To Teach Ambition.....	64
True Education.....	<i>Rev. Prof. Clark</i> 1
The Ontario Educational System and Voluntary School.....	<i>Lawrence Baldwin, Barrister, etc.</i> 361
Public School Leaving Examination.....	<i>Prin. E. H. Elliott</i> 366
The Profession of Civil Engineering.....	<i>Stephen M. Dixon M.A.</i> 369
The Growth of P. E. Island Educationally.....	<i>Inspector G. J. McCormac</i> 374
Concerning Girls.....	379
The English Alphabet as it Ought to be Taught.....	<i>Inspector J Coyle Brown</i> 381

THE CANADA EDUCATIONAL MONTHLY.

JANUARY, 1898.

TRUE EDUCATION.*

TEXT:—"That our sons may grow up as the young plants; and that our daughters may be as the polished corners of the temple."—Ps. cxliv. 12.

IN seeking for words to set forth the nature of human education we become aware of the largeness and complexity of the subject. Human nature is so vast, and the aspects which it presents are so numerous, that we do not easily give an account of its moral and intellectual history and discipline. Thus, we may think of the Church of Christ as the Garden of the Lord; and then the sons of the Church will be as the young plants, or, again, the Church is represented as a Temple, an habitation for God through the Spirit; and then the daughters may be thought of as the polished corners of the Temple, for beauty and ornament.

Here, then, are two widely different conceptions of the work of education, and it is hardly too much to say that the one would be incomplete without the other. If we thought of the polishing of the corner stones of the temple alone, we should be tempted to forget that the subject of education was a living conscious thinking being, whose powers had to be brought out and trained; and if

we thought only of the training of the plant, we might forget that nature needs not only development but repression and restraint.

Among all the differences of opinion which prevail on the subject of education, however, we may find a general cognition of the two principles which are set forth in the imagery here employed, namely, that education must be on the one hand a process of development, and, on the other, a method of discipline. And perhaps if we come to a right understanding of these two principles we shall at least have a starting point from which we may go forth in our work of training up the young of our country in the way they should go.

These questions greatly concern those who are responsible for the working of an institution such as that with which we are connected, and the anniversary meetings of which are now being held; and it may be useful for us, at such a time, to go back to first principles and to ask, in a somewhat general way, what are the methods of education which we can approve and justify from a consideration of the being who is to be educated, and which we are bound to pursue, if we would hope to attain to satisfactory

*A sermon preached by the Rev. Prof. William Clark, LL.D., D.C.L., at the Convocation service, held in the chapel of Trinity College, Toronto, Oct. 19, 1897.

results. Let us begin, if we can, with those points in which there can hardly be any difference of opinion.

And, first of all, we must maintain that

I. EDUCATION SHOULD BE SCIENTIFIC.

Such a statement will seem to most of us so completely self-evident that there is no reason for putting it forward, except as an assumption which needs no proof, and upon which other truths may be shown to depend.

And yet there was a time, and it may not even now have entirely gone by, when religion and science were supposed to be adversaries. The conclusions of certain sciences were regarded as being inconsistent with the contents of the Scriptures, and so it came to pass that men of science were denounced as the enemies of revelation, not only by popular preachers of slender attainments but by learned theologians. The men of science promptly paid them back in their own coin, taunting them with their want of faith in their own principles, since they were afraid of being able to maintain them in the presence of undoubted facts.

Happily for both, this conflict has now come almost to an end: and we have come to know and acknowledge that the genuine results of rightly concluded scientific investigation, can never endanger, but can only support the truth, and enlarge our views of the divine order to which we belong. And how should it be otherwise when we understand the nature of scientific knowledge and what it professes to accomplish. The aim of science is to give us knowledge of facts, of laws, of principles, to give us a knowledge which shall be systematic and orderly, and, as far as possible, complete. Its aim is to arrange and classify the facts of observation, so as

to give us a better understanding of their meaning and relations, and thus to bring nature more and more under control.

Now there is no sphere into which science may not claim to enter; and assuredly it cannot safely be banished from the realm of education. And this will appear from whatever point of view we regard the subject, whether we think of learning as an exercise of memory, or as a development of the whole nature, or as a discipline of mind and heart and will, everywhere we meet with laws of thought, emotion, will, and the recognition of those laws is the work of science.

Few can need to be told that these principles are now receiving almost universal recognition. We may grant that, in days gone by, there were great educationists who were guided partly by instinct, partly by the traditions of the past, and partly by their own experience. But it is not reasonable to expect that all teachers should be endowed with such exceptional powers. The ordinary teacher, even the superior teacher, must govern himself by rule, by method, by principle, scientifically ascertained; and whatever our own prejudices and preferences may be in regard to the prominence which should be given to one class of subjects or another in education, there will, at least, be at this present time, no difference of opinion between educated and thinking men, when we say that our educational methods should be scientific.

II. With equal confidence we may assert that

EDUCATION SHOULD BE COMPREHENSIVE.

In other words, a true education will have regard to the whole nature of the being to be educated, whether of man or of any other creature. This is an obvious, elementary truth, and moreover, it is a simple inference from

the requirement that education should be scientific.

1. We have long been agreed that education does not mean the mere imparting of information or human knowledge. Indeed at this present moment we are probably in greater danger of ignoring the importance of such acquisition. From every point of view full and accurate knowledge is of the highest importance. Without this there can be no real mental discipline. Without this there can be no real power of grasping the problems which present themselves in every walk of life. Only the most ignorant and thoughtless can undervalue the possession of knowledge, whether it takes the form of language, or of science, or any other form.

2. Still less can we allow that education is a means of equipping us for the race of life to such a degree that we may outstrip others. Undoubtedly one part of our business in life is to earn a sufficiency to provide for ourselves and those who may be dependent upon us; and there is nothing low or unworthy in attributing considerable importance to this view of our life. We must choose our work—our business, our profession, our calling—and we must clearly contemplate the necessity of living by this calling; and so one considerable part of our education must be the fitting of ourselves for that work. Yet if we come to think of education as a means of merely making more money than others are able to make, and of being cleverer than those who are about us, we shall have degraded this great business of our life and missed its real value and importance.

3. Moreover, education is more than the mere training of the intellectual powers. On the importance of such discipline it is unnecessary to insist. It is man's reason that raises him above the beasts that perish.

"On earth there is nothing great but
man,
In man there is nothing great but
mind."

To see clearly, to reason accurately—this is a great part of man's mental education—a part with which he cannot dispense if he would be properly fitted for any work among his fellow-men.

But this is not all. Man is not mere intellect. He has feeling, imagination, will; and the neglect of these elements of his constitution will assuredly be attended by the most serious consequences. Man is truly educated when his whole nature is cultivated, when all his powers are drawn out and made to work together in perfect harmony.

4. Nor, in speaking of the completeness of the education of the whole man, must we overlook his physical training, the discipline of those bodily powers which are an essential part of man's nature and functions. Certain kinds of education have undoubtedly overlooked the claims of the body, and thereby have done great harm to body and soul alike.

The body is a part of man's threefold nature of Body, Soul, and Spirit. Not only our spiritual nature but also our flesh was assumed by the eternal Word of God in the Incarnation. We are commanded to glorify God in our bodies. The body is the agent of the soul, and again reacts upon the spiritual nature. The neglect or abuse of the body avenges itself upon the soul.

It may indeed seem unnecessary to insist upon this part of the subject in these days, when complaints are heard on every side that young men are becoming so absorbed in athletic exercises that they neglect all time and thought bestowed upon mere intellectual pursuits—when it is said that young men, and even men who are no longer young, can find no enter-

tainment in a book, and find the slightest effort in the way of reading a weariness of the flesh.

But even if this be so, that is no reason why the just claims of man's physical nature should be neglected; and moreover, the very point on which we are insisting is the duty of rendering to the body its own, of conceding its just claims; for we shall thus best guard against that abuse of which many thoughtful men are now complaining. Such then, we maintain, is the only true and complete education for man, that training and discipline which takes account of his whole nature of body, soul, and spirit—which has regard to his whole inner man of mind, and heart, and will.

III. One other characteristic of a true education remains to be considered :

EDUCATION SHOULD BE RELIGIOUS.

It might seem that here also we had passed beyond the bounds of controversy; and that, however much we might differ in regard to what we might call the subordinate doctrines of religion or the methods of religious instruction, we should at least find a general agreement that religion should form part of the education of the young.

And indeed there are not many out of the whole of our population who would condemn religious education altogether or regard it as unnecessary. To take either of these extreme views we must assume that no God exists, or none who concerns Himself with the destinies of men, or that it is impossible for man to know God, or that man is not a religious being.

Is it necessary here—or almost anywhere else—to controvert any of these positions? No one save an Atheist or an Agnostic calls in question the existence of the government of God, or man's capacity for know-

ing and serving Him; and however worthy of attention their difficulties may be at another time and place, they need not occupy our attention here to-night.

We, my brethren, and by that I mean the immense majority of English speaking men, and especially of Canadians, we believe that man was made in the image of God and thereby fitted for fellowship with God. We believe that God has revealed Himself in nature, in the order of the world, in the reason and conscience of man, and supremely in Jesus Christ our Lord. We believe that there is no worse state for man than to be "without God in the world." We are ready to say with our great poet :

"For what are men better than sheep or goats
That nourish a blind life within the brain,
If, knowing God, they lift not hands of prayer,
Both for themselves and them that call them friend?
For so the whole round earth is every way
Bound by gold chains about the feet of God."

And how shall men be brought to worship and to serve unless they are taught the character and the demands of Him whom they are called to acknowledge as Lord and God?

We are here dealing with one of the most serious questions of the age in which we live; and men in general seem to be only partially aware of the seriousness of the subject. Yet on all hands and in both continents, a warmer and ever deeper interest is arising in connection with the religious education of the young; and men are asking how such instruction can be imparted in connection with the systems of education in existence among us. It is hardly necessary to remark that several different methods are proposed, as the non-denomina-

tional method and the denominational method. According to the former, general religious truth alone would be imparted, those fundamental doctrines on which the people of a country or a district were agreed. According to the latter, each denomination would teach to its own children its own special doctrines.

Now, it is believed that most of us would be very thankful for such general religious instruction as would prevent the young from growing up without any practical knowledge of God and of religion. And undoubtedly there is, at the present moment, a serious danger of this coming to pass. When young people are taught about everything except God—when their duties to Him are not inculcated along with their duties to their fellow-men—it is almost inevitable that they should come to believe that the whole matter of religion was of small concern to them and might safely be neglected. We certainly should have no right to be surprised at such a result. And therefore we should be ready to co-operate in any attempt to bring the truths of religion before the minds of the young.

But we believe that there is a more excellent way, the way of teaching definite religious truth, as we ourselves have received and hold it, to those for whose education we are responsible. In such a system all is clear and definite, we are able to teach what we believe, and all that we believe which we regard as necessary for a knowledge of God and what He requires of us. It was on the ground of these convictions and with the desire to provide such an education for the young men who were members of the Church of England that the first Bishop of Toronto took in hand to set up this college and this university. Inspired by the same belief and aim, many generous men and women in Canada, in the United States, and

in Great Britain, gave of their substance that the religion of Christ, as held in that pure apostolic branch of the Church to which we belong, might forever be taught to the sons of the Church. This work has been carried on now for many years with varying success, but with no departure from the original purpose of the institution; and to-night we are commemorating that work, looking back with thankfulness upon the past and praying God for grace to do our work better in the future.

It seems to me, my brethren, that these considerations make a very solemn appeal to us all, to the English Churchmen in Ontario, to the Teachers in this College and also to the Students. Each of these three classes may do much for the work which is being carried on in this place, and it becomes us to ask what it is that we can do.

The Churchmen of the province can give us their interest, their sympathy, and their help. They have already done much, and if some have given but little out of their abundance, others have given much out of their poverty. Much has recently been done to extend our curriculum and to equip the college more completely for its work. But still there remains much to be done, or else certain departments already at work must languish, and other necessary additions will not be able to be paid. This is not the place to go into details. May God, in His goodness, raise up for us helpers in the hour of need.

A very serious responsibility is laid upon the teachers of this college, since upon them chiefly it devolves to give effect to the design with which it was erected. Our work has to be done, on the one hand, with strict regard to the advances being made in all departments of knowledge, and on the other hand, as remembering that all

parts of knowledge proceed from God and lead to Him.

On the one hand, we are not to put religion as a substitute for science, we are not to say that, because we acknowledge the government of God, we need not trouble ourselves to investigate the secrets of nature. We must be students and thinkers, men of devotion and labor.

On the other hand, we are not to do any part of our work in a secular spirit, we are to do it as servants of God and of the Lord Jesus Christ, and of His holy Church.

It is not for me to enlarge on this subject; but as one who is now the senior member of the teaching faculty, and who has taught here for about half a generation, I may be allowed to testify that we who are teaching here value the system which we are called to administer, and would not have it altered, although we long greatly to see it strengthened and further developed. We are thankful for all the religious privileges which we enjoy, for our daily services in this beautiful House of Prayer, and should regard the loss of these privileges as a calamity. God grant that we may ever more fully accomplish the work to which we have been called.

But once more, these considerations speak also to the students of the College, the fruit of all our labors, who must ultimately prove the test of the real value of such an institution.

It is obvious, my brethren, that the design of a College like this must be to send forth into the world those who may be called Christian gentlemen. If we succeed in this, we have herein the proof that the blessing of God has been with us, and the pledge that it will be with us in the future. If it could be said, and I trust it never will be said, that we sent out those who were neither Christians nor gentlemen, then Ichabod would be written on our walls and our doom would be sealed. Let us all remember that for whatever may be the outcome of our work here, we are all of us, jointly and individually, responsible, from the oldest to the youngest. Every thought and word and deed of ours is going not only to the formation of our own characters and the doing of our own work, but is determining the destiny of this place of learning. Every duty faithfully performed or neglected, every work done half heartedly or devotedly,—all have their record in our lives and in the history and destiny of our university.

EDUCATION AS AN AID TO LABOR.*

E. R. DAVEY, M.A., LL.B.

AS so much time and money are being annually spent on education, it is necessary that we should constantly keep in mind the ends to be achieved by it, that we may so judiciously adjust our labors as to produce the most fruitful results.

Education is defined as "the harmonious development of all the faculties

with a view to their fullest and noblest use." It is then both a good in itself and also a means to an end—a good in itself being necessarily and naturally accompanied by happiness—and it is a means to an end inasmuch as it trains the faculties for use. One use, as my text indicates, and no inconsiderable one either, is to aid labor.

Most parents are desirous that their children should be well educated, or have the "education of a gentle-

* A paper read at the Third Annual Congress of the State School Teachers of Victoria.

man ; " but they too frequently overlook the fact that their studies should be so designed as to conduce most expeditiously to their becoming thorough masters of some trade or profession ; for education should afford, above all other considerations, an equipment for the battle of life.

Now, formal education consists of three stages, primary, secondary and university ; but it would be ridiculous to suppose that when the student has passed through these three stages, his success in life is therefore assured, and that he walks out of the school a made man. Nothing of the sort ! He has been engaged with principles and theories for the most part, and the world is now his great laboratory, in which he must put to the only true test of actual practical experience what he has learned in a great measure merely from books. We shall see, however, that in each of the three stages mentioned, the education has the definite result of making the student a more efficient laborer in whatever field he subsequently chooses work. Primary education is that which obtains in our State schools. Its object is to lay a good substratum upon which the child can afterwards build. The three R's, reading, writing and arithmetic, are indispensable for this purpose. In addition, however, geography, English history and a little science are taught, and the child's observing and reasoning faculties are trained so as to render him, as far as possible, an independent thinker and reasoner in order that he may conduct his business in life as an honest, decent and intelligent citizen.

Secondary education is that leading from the State school to the University. It does not exist as a State education in Victoria, except, chiefly, in the Workingmen's Colleges. Many countries possess these secondary State schools, *e.g.*, the United States,

Switzerland, etc., and the colonies of New South Wales, New Zealand, Canada and Cape Colony.

In this secondary stage the boy's mind is further quickened and enlarged by the study of classics, mathematics, the various branches of science or the principles underlying various industries and manufactures. When the pupil has completed the second stage he is qualified to enter the University.

There he can either take up a course in arts and science, by which he will acquire a greater breadth of knowledge and subtlety of reasoning, or he can enter at once on a course of medicine, law, or engineering, as he chooses, and having completed his course of training he emerges a professional man.

But the great mass of the people are dependent for their education on our State schools, and the system provides for a primary education merely, so that none need be under the irreparable disadvantage of being ignorant of the keys of knowledge. Now, knowledge is power, therefore the education of the masses is increased power in the masses, and like steam applied to machinery, it produces accelerated motion. How does education do this ? It gives increased power to think, and therefore to act. All thought, in the stricter sense of the word, is found when analysed, to consist of two elements :—

1. The noticing similarities in things.

2. The distinguishing differences in things, and these are assisted by the memory and imagination. All minds are fundamentally alike in their action, but the cleverest man is he who makes these discriminations and distinctions most readily and accurately.

Now, the mental operations are performed with greater ease, quickness and accuracy every time they are repeated ; so that the mind, like the

muscles, grows strong by exercise, and is developed most when exercised most. As every study necessitates thinking, the power of the mind as a whole is thereby enlarged, no matter what that study may be. All I see, and hear, and feel, inasmuch as it causes me to think, leaves its impression, good or bad, upon me. "I am a part of all that I have met," and my total environment, in addition to my innate propensities, is responsible for my being what I am to-day. The mind, therefore, partakes of the nature of the food it feeds upon, and, as bad food produces a sickening effect on the body, so improper mental food weakens and poisons the mind. We see, then, that it is essentially necessary that the subject-matter of study should be so carefully selected as to produce the most beneficial results—that is, the most efficient citizen, mentally, morally and physically.

The mind governs our actions, for it is that which feels, and knows, and wills. 1. The mind is that which feels, as when we experience the sensations of coldness or of heat, of pleasure or pain, of love or fear. That is the emotional side of the mind. 2. The mind is that which knows. That is the purely intellectual function of the mind whereby it perceives, reasons and judges. 3. The mind is that which wills. It exercises the power of choice or volition; that is the moral side of the mind.

Any education, therefore, which neglects to properly cultivate any of these three parts of the mind will not produce the efficient man nor the efficient laborer.

The moral and mental forces, then, should be developed, strengthened and controlled by education, and to be a successful student necessitates, like every other success in life, possession of certain moral qualities, *e.g.*, he must be industrious, persevering in difficulty, self-denying—spurning de-

lights and living laborious days—determined to endure to the end. And it is simply these qualities put into actual practice later in life that have enabled men to stamp their marks indelibly on the history of the Empire.

The student may forget the subject-matter of his studies, but the increased power given by them remains fixed in his mind; for the habit of grappling with and mastering difficult problems has given him an increased power to deal with the difficulties of his daily life, a quicker insight into things, and a readier power to adjust the necessary means to the required ends. This is the "permanent residuum" when his school tasks are over. The mind has not been turned into a mere storehouse of words—for "to know merely by heart is not to know at all"—but it has been turned into a workshop; that is, it seeks more and more to find out the *causes* of things. The understanding or intelligence is always brought into play. It is not what was stored up as intellectual fat that is serviceable, but what was turned into intellectual muscle. And this is the education which is of supreme assistance to the laborer, no matter what work he may be engaged in. If a man have not ability to use it, his knowledge is not power at all, but so much dead stock.

The physical education must also be attended to. We need strong bodies in these days of keen competition, and while we seek to give the sound mind, we must also give the sound body. A first requisite, it has been said, for a good man is that he be a good animal, so that every good teacher will attend to the physique of his pupils. It is a most pitiable spectacle to see a man with a vigorous intellect ruined through having overwrought and broken down his constitution.

We see, then, that in our education

we must cultivate the mental, moral and physical powers side by side if we would have the man efficient in the widest sense of the term, but more especially as a laborer. Now, labor is defined as "any action either of mind or body for a definite object." I will not waste your time by showing its uses. You have merely to look around for its monuments. In a word we can sum it up, viz., we are indebted to labor for all the necessities and conveniences of life and all the art and sciences which we possess. Nothing is got without labor. Even the wild fruits and flowers must be gathered, preserved and stored. Oil is abundant, but the whales which yield it are swimming amid the Polar seas. Labor, then, is "the purchase money of all things," and as a rule the more skilled the labor the more valuable are the manufactures. A man also is measured by his capacity to work. "A man is what he does." That labor is honorable and dignified has become a household expression, and this is proved by the fact that the lazy man is an object of universal scorn and contempt. Moreover, labor is an absolute necessity for our progress. If we do not work degeneracy of mind and body as inevitably follow as night the day. There is no such thing as standing still.

It is unnecessary for me to prove that the natural powers of the Colonials are at least equal to those of any other nation. This has been proved over and over again, and London rings with the praise of some of our artists. Other things then being equal, how would you account for any inferiority in the quality of our manufactures? Is it because of any deficiency of skill in the workmanship?

England found that in the London Exhibitions of '51, '61 and '67, that her manufactures were unequal in many respects to those exhibited by

foreign countries, and that, in order to compete with them and hold her supremacy in the commercial world, she must educate her laborers, for "upon lines of equal resistance the weaker go to the wall." The "Made in Germany" scare is not to be treated lightly, and it should act as a warning and stimulus to us; for, as Mr. Scott Russell says about England—"Should the day come when our manufacturers are less skilled, less informed, less able than our rivals, the flood of raw materials to our shores and the back current of manufactures to replace them may take another direction and surge on other shores"—showing the cause of possible decline in her manufactures, and it is worthy of our careful attention.

We are all acquainted with the man of one idea, who will not part with it for fear lest he should never get another, and who sticks to it with an astonishing stupidity and pertinacity. This generally is the result of deficient general education. Of all laborers, the Saxons and Swiss—more especially the Saxons—are preferred, owing to their superior general education, for they comprehend the instructions given them readily, and quickly apply any new methods to their work. There is also less blundering, waste and misdirected labor with the educated laborer, and, therefore, a great aid is afforded to industry.

It is said that volunteers learn their drill much more quickly than the regular troops owing to their superior general education, and statistics taken in Massachusetts proved that the most highly paid were the best educated, and that the wages diminished in a scale corresponding with the inferiority of their education—those who could only make a mark as their signature receiving least of all.

Now, a good general education enables one the more easily to master

any particular trade, and the laborer must be skilled in special craft. There is much truth in the maxim, "He should know something of everything, and everything of something," and the effect of technical skill in the laborer produces surprising results. A skilful artisan will in a few minutes complete a work beyond the powers of a person unacquainted with that art. A professional man every day, almost without conscious effort, disposes of matters which to the unprofessional person seem hopelessly perplexing.

And it is remarkable that these operations which have taken most pains and time to learn are capable of being ultimately performed with marvellous accuracy and ease, *e.g.*, take the athlete with his astonishing gymnastic feats, or the skilled musician for delicate discriminations in sound and touch, or the cook in preparing savory dishes for the epicure. It is the triumph of art to conceal all effort, and this, at times, makes us inappreciative of the degree of skill attained.

How necessary it is that our artisans should become artists in those manufactures which produce the finest combinations of form and color is brought vividly before our minds when we see the finish and beauty in many imported articles. We see these qualities *sometimes* in our own manufactures, but we are too apt to think that because we have a good primary school system, and that none need be unable to read and write, we are, therefore, sufficiently "up to date," and quite equal to any other nation in manufacturing ability. It is to be hoped we are not building a fool's paradise about our heads. Take Switzerland, with its population of over 3,000,000, enclosed in some 16,000 square miles, and compare its educational system with ours. A search was once made there for the

men who could neither read nor write, and they found one, but it was learnt on enquiry that he had come from Savoy. In technical education they are enthusiasts, and have schools for farming, silk weaving, cattle grazing, butter making, horology, etc., and from time to time lectures and short courses of instruction are given in different parts of the country on horticulture, viticulture, fodder-growing, cattle-breeding, etc. Even our sister colony spends double the amount on technical education that we do. The United States spends over 13,000,000 dollars per annum on secondary schools.

What is Victoria doing in the matter of technical education? Very little indeed. The State assistance to the Working men's Colleges is only £12,000 per annum, and we should bear in mind that the cost of our primary schools has been reduced £250,000 per annum in five years.

In our State schools at present the science taught consists merely of a few principles of physics, physiology, and drawing. The curriculum, however, seems sufficiently extensive, though much might be said in favor of increasing the science by including the elements of such subjects as mechanics, chemistry (especially agricultural), metallurgy, domestic economy, etc., and the main principles underlying our chief industries, seeing that we have no secondary schools in which to teach them. Surely such knowledge would be of infinitely more practical benefit to the boy when he leaves school than so much history, geography, etc. He would then go out into the world with his eyes open to the practical value of science as applied to manufacture, and would be stimulated to further explore its fruitful fields.

But our Government is not absolutely dead to our educational requirements. Increased funds, no doubt,

will give greater vitality to the Education Department.

The Agricultural Department, however, seems well awake, and has revolutionized the butter-making industry by teaching the farmers the proper methods of cream separating. Probably we shall get the highest price in the market when we have perfected our manufacture.

Experts are also being employed in our wine-making industry, and our tobacco, cigar, and other manufactures. Some, doubtless, are anxiously looking forward to marked improvement in these productions. Science, then, by enormously increasing the efficiency of labor, makes a corresponding increase in the value of the manufactures and productions. There is, as a direct result, more money to distribute both to the capitalist and to the laborer, and wages rise accordingly.

Now, of all studies Mr. Herbert Spencer puts science first. Some reasons are :—

1. It cultivates the *observation*, because the teaching of it is essentially objective ; they are learnt rather than words. The results are manifest to the senses.

2. It cultivates the *judgment*, because it prevents guessing, or jumping at conclusions.

"The great fault of the community," Professor Faraday says, "is want of judgment, and it is ignorant of its ignorance ;" and this is due, he says, to want of scientific culture. We can see how science improves the judgment ; for nothing is taken as true until the conclusions from data have been verified by observation and experiment. All prejudice must be laid aside, for the evidence speaks for itself. Seeing is believing.

As for the usefulness of the knowledge so acquired :—(a) It is a knowledge of facts, not of opinion merely. "Necessary and eternal are its

truths, and science concerns all mankind for all time." (b) Science underlies the fine arts. The artistic workman must know the laws to which the materials conform, e.g., of color, shape, etc. For self preservation the knowledge of physiology is greatly needed ; for industrial purposes, chemistry is essential. There is scarcely an industry in which chemistry is not of service. It is useful in the kitchen ; for cookery, in ventilation, and the sanitary condition of our dwellings ; in agriculture—to economise manures, and to supply the land with what is necessary to the growth of the plant. In physics, "the mother of the sciences," we all have occasion to use the lever, the pulley, etc. And the general effect of scientific study is thus remarked by Prof. Tyndall :—"When prejudice is thus put underfoot, and the strains of personal bias have been washed away—when a man consents to lay aside his vanity and become nature's organ, his elevation is the instant consequence of his humility."

What we owe to science is beyond expression. It has tamed the wild force that rushes through the telegraph wire, harnessed the steam engine to serve man's purposes, increased commerce by steamboats, railways, electric cars, and in other ways millions now find support owing to it, where before there was only food for thousands. Wandering tribes by its aid have become populous nations, and it has given them comforts which their few naked ancestors never dreamt of. And the daily discoveries tend to show we are not only on the shore of a vast unexplored ocean of knowledge. Yet, students, who have spent years in education, and would blush to pronounce Iphigènia, Iphigenia, or to show any ignorance respecting the labors of a famous demi-god, show no shame in confessing their ignorance of the functions of the spinal cord, or

the normal rate of pulsation, or how the lungs are inflated. So anxious are they to keep up the traditions of 2000 years ago, they neglect to study the structure and functions of their own bodies.

"Science is only now receiving a grudging recognition. But we are fast coming to the *denouement*, when the positions will be changed, and while its haughty sisters sink into unmerited neglect, Science, proclaimed as highest alike in work and beauty, will reign supreme."

The productiveness of any people is limited by their knowledge of science. One industry is one science and that science on another, and so on. Take Navigation; it depends on astronomy, which in turn depends on the glass manufacture, which again depends on chemistry, and other arts. Industry, then, will be retarded by ignorance of scientific subjects, and the rank and file of our industrial army cannot keep pace with those who possess a better mental equipment in science to help them.

I have directed your attention mainly to the assistance which increased intelligence lends to labor; now I wish briefly to point out that want of education affords great hindrances to industry, for everything which prevents the laborer from using his powers to their fullest extent is a hindrance. Two of the chief of these are the twin sisters, Ignorance and Intemperance. Ignorance leads to crime. The ignorant man cannot enjoy rational amusement. He frequents the public-house, becomes intemperate, and then the aching head and the trembling hand refuse to perform their ordinary labors. Thus ignorance leads to poverty, and poverty leads to crime. Then the tax-payer is put to the expense of supporting gaols and lunatic asylums, thus hindering the industry of the whole community.

Again, education and extreme poverty are two incompatibles.

People who are educated will, as a rule, refuse to herd in these hovels where the ordinary decencies of life are absent, and where the germs of disease find a secure hiding place. Education enables the people to take such hygienic precautions as to prevent the spread of epidemics.

In Cromwell's time the death rate was 70 per thousand per annum, now it is only 22. Life has been made several years longer during the last two centuries, as shown by the statistics of life insurance societies. Sierra Leone has been called "the white man's grave." Yet, now by taking sanitary precautions, the Englishman is as safe there as in his own country.

Again, the want of thrift hinders labor, and this is a mark of the uneducated man. He has not the foresight and prudence of his educated brother. Consequently, when thrown out of work, the State has to bear the additional burden of supporting both him and his family, often for considerable periods.

Now, industry is very largely carried on by co-operation, partnerships, and joint stock companies, etc., where trustworthiness is essential to their formation. The savage could never form a partnership; he could not trust the other partner.

We see then how essential it is that an industrial community should be honest and trustworthy, and how any education which neglects to cultivate the moral qualities is sadly at fault.

We, in Victoria, have gone in for secularism with a vengeance, prohibiting Bible-reading except by visitors, and we have also abolished the teaching of moral lessons except such as occur incidentally in the reading books etc. The teacher may, of course, by his example, inculcate the most valuable moral lessons daily. Still, we have no guarantee that the cardinal virtues are taught, and surely

they should be, either directly, or by being incorporated in the reading-books, either in the form of tales, or other striking illustrations of their application. We should at least aim at a high ideal in this respect, seeing that the mental powers are guided and directed by the moral ones. We see here the scope for good teachers. We should be the living example of justice, benevolence, sympathy, order and industry, and I cannot do better than conclude with the words of Prof. Tyndall regarding the teaching profession:—

“If there be one profession in England of paramount importance, I believe it to be that of the schoolmaster; and if there be a position where incompetence and ignorance do most

serious mischief by lowering the moral tone and exciting cunning and contempt where reverence and noble truthfulness ought to be the feelings evoked, it is that of a governor of a school. When a man of enlarged heart and mind comes among boys—when he allows his being to stream through them, and observes the operation of his own character evidenced in the elevation of theirs, it would be idle to talk of the position of such a man being honorable. The man is a blessing to himself and all around him. Such men, I believe, are to be found in the country, and it behoves those who busy themselves with the mechanics of education at the present day to find them out.”—*Australasian Schoolmaster.*

ALASKA.

FRANCES M. FERRY.

A REMOTE, frozen, inhospitable wilderness, holding foreign intruders at bay with long, dreary winters and inaccessible mountains—repelling even the native people with its austerity of climate and relief—Alaska remains to-day virtually an uninhabited and unexplored waste, though peculiarly endowed with riches that have long lured the hardy and venturesome to seek fortune within its bounds.

Alaska is divided by nature into three parts: Aleutian Alaska, consisting of the narrow peninsula and volcanic islands south of the Behring sea, whose eruptions winter before last made the whole sea seem ablaze and excited considerable comment, is inhabited by a few piscatory Indians known as the Aleuts. Northern Alaska, the vast territory north of the mountains, embracing that portion of the Yukon basin west of the 141st

meridian, is the Alaska of ice and snow and Esquimaux; its seas abound in whales and seals, its rivers in salmon and gold. Southern Alaska, which includes the southern and western slopes of the great mountain range whose ridge forms the boundary between British Columbia and Alaska, and mountain ranges separated from the mainland and from each other by deep sea-claimed valleys, has now nearly lost its identity as the home of the Hiada Indians, the land of totem-poles, the theatre of glaciers, the site of rich gold fields, and the background of Sitka, and is for the present the key to the Klondike. In this role it has gained more notoriety than in all others combined, and it is safe to say that thousands who never heard of Muir glacier, the Hiada Indians, Douglas Island, or the Greek church of Sitka, are now familiar with Juneau, Dyea, and Chilkoot pass,

The climate of Alaska is not so severe as might be expected from its latitude, owing to the genial influence of the Kuro Siwo, or Japanese current, and the warm southwest winds. There is a marked difference in the climate of northern and southern Alaska, since the high mountains circling the coast (numbering among them such peaks as Mount St. Elias, Mount Fairweather, Mount Logan) form a wind barrier, protecting the coast region from the bitter northeast winds, and shutting out the warm, moisture-laden winds of the Pacific from the Yukon district, though, fortunately, the rain winds can climb some passes impassible or unknown to man, and their meliorating influence is felt even in that icy region, whose annual temperature is 25 degrees Fahrenheit, and where 70 degrees below in winter is not uncommon. The conditions along the coast are suited to bring about great precipitation, snow-capped mountains intercepting warm, wet winds, and the rainfall is extraordinary. The average is 250 days of rain or snow in a year; fog and mist are continuous, August being the only month when mountain tops are visible. A despondent tourist asked a squaw if it rained all the time at Juneau, and was amazed to hear her reply, made with perfect gravity, "Oh, no; it snows sometimes." Even white people who live there become so used to wet weather that they do not mind it in the least, but on the contrary long for rain if two or three dry days succeed each other.

Southern Alaska supports a scattered Indian population, divided into tribes and sub-tribes. These Indians are of medium height, and are usually fat and comely. The stranger does not at first approve of such abundant flesh and such rich coloring, but soon discovers a change in his standard of beauty by his condemnation of the most robust specimens of his own race

as pale and puny. The men have adopted European dress, but the "kleutchmen" adhere to their comfortable blankets and kerchiefs. They have their vanities, and use a cosmetic in which they have infinite confidence as a preservative of the bloom of youth. It is a solution of charcoal and fish oil, which they smear upon their faces either to improve their complexions or as a sign of mourning. They are fond of beads and bracelets, and their blankets and kerchiefs must be the gayest attainable, but the most brilliant can not cheapen their brown and red faces.

The Indians differ greatly in disposition and morality, and range from the fiercest and most degraded tribes to those that are peaceable and amenable to the influences of civilization. They are lazy and slow, but strong, patient, and enduring, and in such work as weaving, basket making, and carving, surprisingly skilful. The costly and elaborate chilkat blankets, woven by them, are in great demand. They show great dexterity in converting silver coins, with the aid of knife and hammer, into souvenir spoons, neatly finished and engraved with characteristic devices, their baskets are superior in beauty and workmanship to other Indian baskets, and their carvings in wood and stone prove them descendants of the totem-pole makers.

An Alaskan Indian village consists of a line of rude hovels built along the shore just escaping tide line. Each house has a canoe before its door, not a frail birchbark canoe, but a craft capable of holding thirty people, made by hollowing out the trunk of a gigantic cedar. The Indians that attach themselves to white settlements build along the coast in the same way, with their canoes before their doors and their graveyards on the mountainsides back of their houses. Their dwellings vary from the large clan houses at

Sitka, gaily painted with totems, to the squalid shak with mud floor, in the middle of which burns the fire kindled to serve the three-fold purpose of warming the filthy apartments, cooking the viands, and smoking the winter supply of fish that is suspended on frames where the smoke will find it on its way to the opening in the roof left for it to escape. The odor of an Indian village is something never to be forgotten. The refuse of fish lying about everywhere accounts partially for it.

Alaskan Indians are at home on the water, but avoid the mountains. When it is necessary to go hunting, a canoe loaded with dogs and men (every Indian hut harbors at least a score of dogs) is rowed to the desired place, the dogs are sent up into the mountains to drive down the game which is then shot by the waiting huntsmen.

There are numerous white settlements in Southern Alaska. Sitka, the capital, and Juneau, the metropolis, are chief among them. Sitka is interesting as the seat of government, for its quaintness and history, for the Greek church, the old cannon marked with the double-headed eagle, and the ancient log-houses, relics of Russian America, and for its traditions, but it is unique, and in no way characteristic of modern Alaska. Juneau, on the other hand, is typical of the numerous mining towns of mushroom growth that perch upon the mountain sides, wedge their way into valleys, and hang upon the reluctant and inhospitable coasts of that country whose surface will not allow towns to nestle and look at home. It is a compact little hamlet between the sea and dark towering mountains. Across the bay lies Douglas Island, where the famous Treadwell mill is situated, the largest stamping mill in the world. The waters in the harbor of Juneau are rough and discolored by the water brought down

from the mines. The lofty mountains, with dark green mantles and ermine caps, rising immediately behind the city would bury it with snowslides were it not for the protection of intervening hills built by avalanches. The village is saved from ugliness by the kindly Alaskan moss which has a wonderful way of softening down plain, graceless outlines, and concealing the newness and commonness of its mean little frame buildings. An old skid road and two or three mud ways, churned where much used to a perfect broth, are all that Juneau has to show in the line of roads, for vehicles are little used in that rough country, and rubber boots are cheaper than pavements.

No permanent improvements are attempted, as Juneau's citizens are there for gain, not to spend; to get rich and go back to their homes in the States.

There are about three thousand whites in Juneau and as many Indians, but it is not an incorporated town and municipal affairs take care of themselves. Stores are open Sunday, the innumerable beer saloons are open seven days in the week and twenty-four hours in the day; music, dancing, and drinking seem never to cease. Whiskey is prohibited by the government, and home-brewed beer is the only drink sold. The miners are a rough class of men, the Indians are evil and sinister looking, and Juneau is pronounced a wicked little town. But it is not wholly bad. It has its mission, churches, and schools, and many of the homes, though small and snug, give evidence of refinement and luxury. Soft carpets, draperies, electric lights, fine china, musical instruments, pictures, books, and polite children are not rare. The stores have a large assortment of goods, quite up-to-date in all departments, offered at prices very little in advance of those demanded in Seattle.

The work going on in Alaska now seems a plundering rather than a developing of the country. A country can only be developed by a people who look upon it as home, and the, at best, semi-civilized Indians are the only ones who so regard Alaska. Our government is doing what it can to save these half-tamed children of the wilderness from the vices and give them some of the benefits of civilization by keeping "fire water" away from them and providing schools for their little ones. These schools are in charge of earnest and efficient teachers and are supplied with the books and school appurtenances in

use in the most progressive schools in the United States. The teachers say that the little Indian children are very successful with manual and artistic work and love it, but make slow work of arithmetic and grammar.

The Christian churches, Greek, Roman and Protestant, are doing their part to enlighten this simple people, but it is doubtful whether, despoiled of game and fish, they can long hold their own against the cruel avidity of the whites who promise to leave Alaska a greater wilderness than they found it.—*Public School Journal*, III.

GOOD CITIZENS.

BY FIDELIS.

WE have all heard much, from time to time, about the importance of religious teaching in our schools—a subject which, as we also know, has been made a brand of discord among our Canadian people. Yet so much excitement on this point seems to be somewhat superfluous, so long as there is so much to be done—and so much generally left undone—in making our schools the means of training good and law-abiding citizens from the most purely moral point of view! Nothing indeed can be farther from the intention of the present writer than to minimize the power of truly Christian training, but let us remember that, in the education of the race, the elementary moral teaching of Sinai preceded, by a long way, the higher spiritual influences of Galilee; and if the A B C of law-abiding citizenship and morality are not taught in our schools, it would be of little practical use to overlay this lack with a veneer of doctrinal generalities, such as make

up too large a proportion of our average Sunday-school teaching.

If the State undertakes to pay for the education of its youthful population, thus relieving individual parents of the expense, and if it compels the same youthful population to attend the schools it has provided, it is clear that the only justification for thus educating the children at the expense of the community must be the education and training of good and useful citizens, who are to build up a future orderly and law-abiding generation. That any State system should aim at no less than this, and should adopt the best possible means of accomplishing its aim, is what the community has a right to expect. Now it is only too evident to careful observers that, with all the spread of education, and all the vaunted improvements of our public school system, the practice of petty offences against law and order—nay, a spirit of reckless lawlessness and defiance of order—are notorious

ly prevalent among a large section of our youth—growing with our country's growth, and increasing with our population. And the public school is the only place where this rapidly spreading evil can be certainly met in its beginning, and nipped in the bud. Attendance at the Sunday-school is not, of course, compulsory, nor can the character of its teaching be submitted to any State supervision. And we have only to look around us to be aware how hopelessly unfit and unlikely many parents are to meet the evil by a careful and judicious home training.

In these circumstances it ought surely to be one of the very first aims of our school system: to correct the deficiencies of parents in the moral as well as intellectual training of their children, by bestowing its most careful attention on the training of good citizens. And to this end, definite teaching on the subject is needed. It is all very well to assemble mass meetings of children in some public place, and teach them to wave flags and cheer, and sing "The Maple Leaf Forever!" It will seldom occur to them to connect this sort of entertainment with the duty of respecting their neighbor's property, and doing their part towards preserving the public safety and order. Nor will it do to trust vaguely to the moral influence of the teacher. No doubt every good teacher's influence will be, to a certain extent, on the side of morality in general, but here again we need something much more definite to be required. Many of our teachers are too young and inexperienced to be really aware of the evils they have to cope with, or even of how they are to endeavor to meet these evils. Moreover, the number of lessons they have daily to hear and the number of subjects they have to teach so fills up both time and mind that it is little wonder if the training in good citizenship is,

in the great majority of cases, overlooked or forgotten.

Now, neither children nor adults can be expected to learn to obey laws of which they are in absolute ignorance, and it is not too much to say that the great majority of our school-children are utterly ignorant of the existence of statutes—and of penalties for breaking them—against which they are nevertheless perpetually transgressing, oftener from sheer thoughtlessness than from any other cause. Their parents themselves are too often so lax in their own morality that they think very little of the matter if their children help themselves to their neighbor's fruit and flowers whenever they feel a desire to do so, and are much aggrieved if the theft is called by its right name. Small boys go about aimlessly seeking amusement for themselves wherever they can find it, and in utter ignorance of the harm they are doing; ignorant, too, that they are law-breakers in so doing—will cut and bark trees, shake and break them when newly planted, and light fires in woods even in times of drought, without the least realization of the serious nature of the offence. They have found their mischievous pranks so often tolerated and treated lightly, that they go on light-heartedly to their destruction of property with no little damage both to private and public well being. Canada has recently had large tracts of country desolated by forest fires, a cause of untold loss throughout her whole past, and we have a statute forbidding the starting of such fires, under a heavy penalty. Yet our children, in general, know nothing of this law, nor do they realize the serious risks involved, and, notwithstanding all our bitter experience, boys go out to the woods and recklessly start fires, for their own amusement, without a thought of possible results. Were they taught the seriousness of such an offence against the law, and the heavy

penalty incurred, it would certainly, in many cases, prevent the offence. Similarly, if they were taught something of the penalties attached to the injuring of trees, and the reason why such penalties are imposed, it would gently tend to check the acts of youthful vandalism, committed in sheer thoughtlessness, from which small places, especially, perpetually suffer. In many places, too, orchard and garden robbing have become such a pest as greatly to discourage small fruit-growers from their too often fruitless labors. A little pointed instruction on this head in school, with a reference to the general conduct of the pupils in giving them pass certificates, would have its perceptible effect on this evil also.

It is growing into an accepted fact that our schools are not for mere book-learning, but for fitting the pupils, as far as may be, for the future duties of life. To this end we are introducing manual training, which is so important to the many who are destined to follow some handicraft for a livelihood. Now, as all our boys and girls are destined, if they live, to the responsibilities of good citizenship, while not one-tenth, in all probability, can be expected to develop into scholars, the training in citizenship is of far greater importance than the training in scholarship. It is of much more consequence to the community whether Tom, Dick, or Harry learns to be an orderly and industrious citizen than that he should be able to interpret Shakespeare, or work out problems in mathematics, which may never be of the slightest use in after life. Why, then, should not our schools become, in the very first place, training-schools for good citizens? Why should not the two kindred principles of truth-telling and keeping one's word be taught as strenuously as the rules of arithmetic? Is not good conduct worth more than

good grammar, since the building of character in the rising generation is the truest wealth a country can possess? Surely, then, we should have in our schools, as the foundation-stone of all true progress, a careful training in plain morality, an endeavor to instil high principles of action, which, if insisted on as an important part of every teacher's duty, would soon have its effect in raising the tone of practical morality among our people, especially in places where this tone is now lamentably low. The intellectual progress would be advanced by the same means, for principle would tell in all studies, and perhaps the wretched practice of "cribbing," which has become such a plague-spot among us, would then be in time stamped out. Why should not there be suspended in every school, in large letters, as the guiding motto, that inspired Golden Rule which is the basis of all social order? Why, in addition to this, should we not also have, plainly printed on large placards, the statutes which hear on such offences against property and person and the dumb animals as boys especially are always prone thoughtlessly to commit? Why should not these be explained and enforced by the teacher from time to time, and examinations occasionally held on them? And, to complete the work, why should we not have a simple text-book on good citizenship and public morality, which should have a prominent place in the school curriculum, and a knowledge of which should count for not a little in the pass examinations? In time, we might thus have a generation somewhat more free, not only from ordinary dishonesty, but also from political corruption and the eager desire to fill individual pockets out of the public funds. In short, we should begin to have truer patriots and better citizens!

As the sources of our immigration

widen, the level of home morality is sure to degenerate. We can depend only on our schools for training good citizens. In the past the attention of teachers has been too exclusively turned toward the cultivation of the intellect. Let us hope that signs which he who runs might read will not be disregarded, and that for the pre-

sent we may cease to quarrel about instruction in theology, until we shall have done a little more in the direction of teaching the children in simple morality—in those things which are true and just and lovely and of good report, against which there is no law, and can be no rational opposition.—*The Westminster.*

COMPOSITION AND RHETORIC.

HARVARD COMMITTEE.

THE celebrated series of reports of the Harvard committee on composition and rhetoric, which have caused so wholesome a perturbation in the educational world, has come to an end. There have been four of them, each loaded with dynamite, and the members of the committee, Charles Francis Adams, E. L. Godkin, and George R. Nutter, think that the desired object has been accomplished and that further discussion may be postponed till 1920, or thereabouts. It is difficult to exaggerate the importance of the statement made in the last of these reports, No. 71, that "the attainment of the end it has all along had in view may be assumed. Correct, elementary, written English will in the near future be scientifically taught as part of the primary and secondary education." In brief, the colleges will soon be able to drop the rudimentary work in grammar, spelling and composition which has been forced upon them, and confine themselves to the proper field of collegiate work, while the many graduates of the lower schools who are unable to go to college will no longer be left without a sound training in the use of their mother tongue. It is a long stride forward, and the Harvard committee has had a large share in its accomplishment. In one of its earlier reports, the famous No. 28, the com-

mittee mercilessly exposed the weakness of entering freshmen by giving specimens of their work, reproduced in fac-simile. In its last document it undertakes to show some of the causes of this weakness and to point out the wrong ideals which many schools have adopted in their haste to comply with the sharp lesson from Harvard. To this end all the students in the various English courses at Harvard were requested to describe the work in composition which they had before entering college, and to criticise it in the light of their subsequent experience and instruction. Extracts from the 1,300 papers received have been selected, classified, and published in the present report.

The documents are entertaining and instructive in a high degree, and the reader can readily make allowance for the measure of injustice which could hardly fail to result from setting so many immature young persons to criticise their former teachers. But after eliminating prejudiced criticism, and it should be said that nearly all the papers presented show a commendable fairness of spirit, there is still abundance of evidence of the faulty and ill-judged character of the instruction given. As to the actual attainments of the graduates of secondary schools, the committee finds that while there has been encouraging pro-

gress, there is still plenty of room for improvement: "About 25 per cent. of the students now admitted to Harvard are unable to write their mother tongue with the ease and freedom absolutely necessary to enable them to proceed advantageously" in any college course. The requirements for admission to college should be raised to the point of compelling candidates to prepare their examination papers neatly, legibly, and with a certain amount of mechanical facility, including a decent regard for penmanship, grammar, and spelling."

The schools seem to have misunderstood the new college requirements in English, and apparently assume that "the institutions of secondary education are expected annually to send up for admission to college solid phalanxes of potential authors, essayists, and litterateurs," and the committee finds the evidence of misdirected effort and unintelligent zeal to "verge on the pathetic." It is the university, not the preparatory school, the report bluntly proceeds, which has to do with "style" and "individuality," "mass, coherence, and form," with, in a word, that much abused and misused branch of study known in educational parlance as "rhetoric." On the other hand: "The province of the preparatory schools is to train the scholar, boy or girl, and train him or her thoroughly, in what can only be described as the elements and rudiments of written expression,—they should teach facile, clear penmanship, correct spelling, simple grammatical construction, and neat, workmanlike, mechanical execution. And this is no slight or simple task. It certainly, as these papers show, is not generally accomplished now."

But neither all the blame nor all the work must be put upon the shoulders of the special teachers of English. If the documents given in this report prove anything, it is that the

only efficient and satisfactory method of imparting this fundamental mastery of writing is by incidental instruction in connection with other branches of study. Not only is the time that can be given for set work in composition limited, but it is difficult to get the youthful pupil interested in it. It seems to be something quite aside from his school study—a vexatious and burdensome "extra." But if the study of English is carried into every lesson-room, if Latin, Greek, geography, history, and mathematics all are made to contribute their share, quite another face is put upon the matter. Instead of being a polite and supposedly useless accomplishment, to be laboriously tackled once a week, writing becomes the indispensable tool of daily work. The objection invariably made to this suggestion is that there is no time, and so the committee proceeds to demonstrate that all this may be done without loss of time or the expenditure of additional work:

Every other day, for instance, the recitation from the classics would be, not oral, but, as in the college, written. The scholars when they came into the class, would appear with a written translation in their hands. Instead, then, of rendering the lesson of the day orally, as now, such of them as were called on would read from the papers they had prepared. These papers the instructor could take, in the class, glance over them, and satisfy himself as to the execution; the papers of such as were not called upon at that recitation would then be handed to the master for such further examination as he might wish to give to them, or consigned directly to the waste-paper basket; in either case the scholars would have had their drill in preparing the lesson, and their turn to be called upon would come some other day. The whole class is not necessarily called on for

oral recitation now ; it would not be called on for written recitation then. The severe, constant, daily discipline and practice would, all the same, have been undergone ; and the master would have disposed of his work during school-hours.

Of course, this daily exercise in writing should not be a substitute for the special work in English, but only an auxiliary to it. The main point is to make the pen an indispensable tool, to keep the pupil using it till it is as familiar to his hand as a hammer or saw is to a carpenter. And if in ad-

dition to this constant and stringently corrected elementary work, the school-boys can be led to read a great deal of standard English literature, not with any notion of emulating it, or even of analyzing it critically, a task which may be left for maturer years, there need be no fear as to the quality of their preparation. The Harvard committee has pointed out the correct way so plainly and so forcibly that there can be no excuse for schools which fail to perform this modest, but absolutely essential work.—*Public Opinion.*

STATE TEXT-BOOKS.

AT the recent meeting of the Pennsylvania State Association of School Directors, Mr. William McGeorge, Jr., of Cynwydd, Montgomery county, discussed the question, "Should the State Control and Publish School Text-Books?" He said, in part :

What does this question presuppose and involve? It may mean either that the state edits, manufactures and supplies text-books ; or that the state simply selects them. Whichever horn of the dilemma its advocates may take, they are thereby making one of the most deadly assaults possible upon the integrity and efficiency of our school system.

It is amazing that this book question can be seriously proposed so near the beginning of the twentieth century, even if there were no experience to draw upon. But what can it mean to-day, in the face of the unanimous testimony of the school men of Vermont, and Maryland, and California, and Oregon, and Minnesota, and Indiana—everywhere that it has been tried—to the effect that the working of such laws in any form produces evil, and only evil results.

How has "uniformity" worked where it has been tried? If human testimony is worth anything, the educators who have watched the working of these books should know them. Hear what they say. One superintendent in Minnesota says : "Our text-book system has retarded the true progress of the schools." Another : "If every trial exhausts some tempting form of error, then truly the experience of this state should deter others from experimenting in the school-book business." Still another : "I do not think state uniformity is desirable ; the books are not uniform here, as the state books have been laid aside for something better." And so on, indefinitely.

Hon. B. G. Northrup, ex-secretary of Connecticut State Board of Education, says : "The lessons of experience are decisive upon this point. The states which have tried this sovereign remedy of enforced uniformity have found it worse than the disease. Wherever such a law has been fairly tried it has soon been repealed."

Ex-State Supt. Henry Rabb, of Illinois, says : "It has been frequently tried in other states, and uniformly

failed, whether the books have been manufactured, purchased, or selected by state authority."

Indiana and California tell the same story. Uniformity is not desirable, even were it possible. Every community should have the right to choose such text-books as are adapted to its needs. And the power to change text-books should also be carefully preserved and surrounded by every possible safeguard. Even the inert soil wants a change of manure and products.

Does the idea of economy or cheapness attract you? When were excellent school books ever so cheap as they are to-day? But on this question let us see what those who have tried it say of the plan:

In California, the state printer estimated that he could produce 500,000 text-books for \$89,000. Before he had published 187,000 volumes, he had expended \$357,000, and like Oliver Twist, was asking for more.

In Indiana, a few years ago, a law was passed, providing for the state publication of text-books. After the lapse of some time, a partial list was made, which extended only to the lower grades of pupils. The high school books, as before, were furnished by publishers. This list of books, which were to be published according to law, was first published by a syndicate, or school book company, as it was called, and after operating a year or two, the company sold out to the American Book Company, and the greater portion of the school book trade of the state of Indiana is now under the control of the last named company.

In Minnesota, the verdict of superintendents and other experts reads thus: "The books are inferior in manner of presenting subjects and in general make-up." "Nobody except the contractor and a few in his interest likes the books—and why should they not?" "They are more

expensive, because they do not satisfy the requirements." "It discourages competition; it favors monopoly; the law was conceived in corruption, and passed in the interest of the jobber, who needed a contract and got it." "The state books are shams, in matter and make." "There is no real saving to the people." "As to the cheapness of books, there has never been a time, since long before this law was contemplated, that superior books to those furnished by the contractor could not have been purchased at as good figures."

To sum up the whole question, this scheme of state uniformity in text-books has been a failure wherever tried. It has not, could not, and would not reduce the cost. School books now are the cheapest books published. It would be absolutely impossible for the state to make books as well as those furnished by the publishers, and each community should be considered able and competent to choose its own text-books. Remember text-books grow; they are not and cannot be made to order, and therefore it is ridiculous to suppose the wisest committee could at once originate improved books. This idea of uniformity bars all progress. Text-books produced under such a system are so poor that they prevent mental development. They stimulate teachers to violate law and get around the prescribed text-books, and even the most advisable and necessary changes cannot be made without the consent of the contractor.

In conclusion, have you considered what would be the effect of adopting any set of books, however good, on the children? Have you stopped to consider the cost to them, and the injury done to a whole generation in its education? If a set of books are adopted for a given number of years, would there, or could there be any improvement? If books *must* be bought.

of him, would the contractor spend money to improve them? Remember, that once this monster gets a hold on you—once let these books in—and they will be like the Old Man of the Sea; you will be unable to shake them off. For the sake of the schools, for the sake of the children, let us un-animously protest against any and all such legislation.

THE SECURE HOLD OF EDUCATION.

ONE of those controversies about education which break out from time to time, no one knows how, is now raging in England. Everything seems to be quiet, all the principles settled, the schools and the universities going serenely about their work; when suddenly all is confusion and turmoil. The trouble usually arises from a radical or startling utterance by some innovator or lover of paradox. He perhaps questions or denies one or more of the fundamental theories of modern education. Thereupon the whole learned world at once agog; the air is thick with big-wigs and lexicons; the entire subject of education is threshed out again, to the last straw, with a young zeal as if nothing had ever been said or written about it before. Then a long breath is drawn, and quiet reigns again until the next disturber of the peace comes along.

Prof. Mahaffy appears to have been the one to fire the train this time. He chose the occasion of giving some prizes at Mason College, Birmingham, not to congratulate the lucky recipients on their attainments and advantages, but to take up a doleful parable against modern education in general. He doubted if the schools gave as good an education as they did thirty years ago; at any rate, he had discovered frightful ignorance among graduates of his acquaintance. Anyhow, even if the education of today were skilfully conducted, what were its results? He had himself known students of his own in Trinity College, Dublin, to turn out remark-

able criminals. Did that not argue something wrong with the system? He modestly said nothing about what it argued in the teachers. But, however that might be, he had the gravest doubts whether the diffusion of education had diffused morality or happiness. We looked about, and on all hands what did we see? Discontent, degeneracy, loose thinking and looser morals, wretched lives, and a hopeless outlook.

Perhaps the most effective comment upon these gloomy remarks of Prof. Mahaffy's was that made a little later by the Duke of Devonshire in opening a new technical school. He declined to enter into an abstract discussion of the question whether education was essential or really conduced to happiness. The practical truth to recognize was that the people had pronounced for popular education, and that, therefore, it must go on. They have the power to decide, and they will never decide to allow themselves or their descendants to fall back into the state of general ignorance which marked the time when, some are saying, people were happier, if more ignorant. The secure hold of education in the modern world is due to the fact that, whether or not it makes people happier or better, it is necessary for them, if they are to continue to exist. Thus education takes its place as a necessary part of the struggle for existence.

This is, of course, especially true of technical education. Science and art enter more and more intimately into the conduct of every one of our

great industries. If they are to continue, and to support the masses of the population that depend upon them for a livelihood, they must be more and more profoundly studied. Methods, processes, machines must be given the highest efficiency. That means necessarily a trained body of workers. It has been conclusively proven that the growth of German manufacturers, and of German manufactures, and of German exports of manufactured goods, is due primarily to the application of German science to the business. It is not tariffs, high or low, not trade either following or preceding "the flag," not reciprocity, nor any other kind of jugglery, but just the plain, downright putting of highly specialized knowledge at the service of manufacturers, which has raised the hue and cry about "made in Germany."

Into this question of competition and of comparative national superiority it is not necessary to enter. But it should be reassuring, to those who sometimes feel doubtful if our present enthusiasm for education will continue thus to be reminded of its powerful grip on the life of the world. The more complex life becomes, the more varied and specialized the pursuits of men, so much the stronger is the hold of education. To be thoroughly in-

structed in the scientific comprehension of arts and crafts is necessary not simply to their flourishing, but to their very existence. A flagging of attention or intelligence in one country means the instant forging to the front of another; so that, at least as regards technical education, its fostering and success link themselves to the very life of the nation.

This assured, the rest is assured. Technical education builds itself upon and implies general education. Successful industries mean wealth and comfort and leisure; and those mean, in selected minds at least, the higher intellectual pleasures. "Shall we have Latin verse writing?" is a question lately brought up in England. Well, if we have a broadly based popular education, and a science and industry nourished by the best results of study, we shall also have those who pursue the recondite or the ornamental in education. The two things go together. At any rate, it is idle to talk of the good old times of contented ignorance and unquestioning faith. Their grace, if they had any, is that of a day that is dead. All that remains for us is to make better new times out of the insatiate curiosity and scrutinizing inquiry which have come into the world to stay.—*The Evening Post*.

THE POETS OF OLD ISRAEL.

Old Israel's readers of the stars,
I love them best. Musing, they read,
In embers of the heavenly hearth,
High truths were never learned below.
They asked not of the barren sands,
They questioned not that stretch of
death :
But upward from the humble tent
They took the stairway of the hills :

Upward they clomb, bold in their trust,
To pluck the glory of the stars.
Faith falters, knowledge does not
know,
Fast, one by one the phantoms fade :
But that strange light, unwavering,
lone,
Grasped from the lowered hand of God,
Abides, unquenched, forevermore.

EDITORIAL NOTES.

" Deliver not the tasks of might
 To weakness, neither hide the ray
 From those, not blind, who wait for
 day,
 Tho' sitting girt with doubtful light.

" That from Discussion's lips may fall
 With Life, that, working strongly
 binds—
 Set in all lights by many minds,
 So close the interests of all."

The mid-winter holidays have come and gone and our readers have again returned to their labors. One sympathizes with them in their work. And when we make a retrospect of the past year's movements in favor of an improved education for Canada, we feel that the activities which have been inaugurated are not likely to waver until our common country takes the highest place among the nations, as a progressive education of educational forces. The favor with which the proposal to establish a National Educational Bureau at Ottawa has been received, indicates the tendency towards a national unification of interests that is to be met with in the various provinces, and when the proposal comes to be thoroughly understood by those who are in a position to give it a practical turn, it will not be difficult to foretell how readily it will be hailed by all as *un fait accompli*, bearing with it a much more desired concentration of national interests. The provinces of Quebec and Manitoba, so busy with the setting of their own houses in order, can hardly be expected to give much heed to a problem that involves an outer progress. Yet when these provinces come to understand that the functions of a central Bureau of Education cannot possibly interfere with their provincial rights, they will no doubt join ardently with the other sections of the Dominion in a scheme that is sure to promote the most wholesome of national sentiments.

siderable discussion in the Educational Association of Ontario on the question of post-graduate studies at the University of Toronto. The current of expressed opinion then was rather against post graduate studies, and in favor of more emphatic concentration upon the ordinary Arts course leading to the B.A. degree. The establishment of a course of studies leading to the degree of Doctor of Philosophy has been announced by the University of Toronto. In the very nature of things such a step was inevitable. The young men of Canada must have an opportunity of following their inclination in the matter of learning ; and this granted, the degree follows, as a matter of course. Many students, after taking their B.A. in Canada, went to other countries for research ; to the Universities of Great Britain, Germany, and United States of America. This desire for knowledge is worthy of high commendation. The experience and enlargement of view obtained by residing for a year or two at the Universities of Great Britain, for instance, are of inestimable value to a man, and therefore beneficial to any country whose sons spend time and money in this way. But many are not able to go from home for this laudable purpose of post-graduate work, and are just as desirous and capable as those who can. Therefore it becomes a matter of necessity, we may say, to make provision for them, a much larger class than the former. We are aware that post-graduate work, more or less, has been in operation at sev-

About two years ago there was con-

eral Universities in Canada for a few years past. The University of Toronto has formally set forth the work to be done and the attendance required as a prerequisite for the obtaining of the degree of Doctor of Philosophy. This is unquestionably a large undertaking. Our earnest hope is that the University may find plenty of money and men competent to justify her in her bold venture.

In our last issue we referred to the Manitoba School Question, and late events have not turned us away from the general opinion that the settlement of the educational affairs of that province is no longer a political question, but a social one, and may now safely be left in the hands of the people of Manitoba themselves. Federal or foreign interference is now not likely to have much weight in the counsels of a Province that has made up its mind to provide for its rising generation the very best that is going, in the way of a common school education. There will no doubt be amendments to the laws and forms of administration as time goes on, some of them possibly to be looked upon as privileges by some and disadvantages by others. But the question is now happily out of the hands of the politicians and the professional issues at stake, will of a certainty, remove the differences of opinion, further and further from the political arena; and the sympathy of a common provincial educational policy, will just as surely, in the near future seek for an outer sympathy in the interlinking of professional interests that a Central Dominion Bureau of Education is sure to promote. Indeed the men who have charge of the educational systems of the various provinces, were among the first to sympathize with the objects for which the Dominion Association of Teachers was first organized, and as a practical outcome

from the work of such an association there can surely be no more worthy project than the organization of the Dominion Bureau of Education.

The educational affairs of Quebec, are evidently again in the hands of the politicians, and it is hardly safe to say how they will fare before they have again been relegated to the constituted authorities who have had the handling of them so long. During the discussion of the new Bill in the Legislature many things were said that perhaps had better have been left unsaid, while many things were said that showed how little our public men sometimes know of the measures that tend to improve a school system. The main question under discussion was whether there should be a Minister of Education or a superintendent; a thesis that is not unfamiliar to the people of Ontario, and one that is never likely to be permanently settled to the satisfaction of all, unless when a good man and a conscientious happens to hold the reins in the Education Department.

TEACHERS.

The total number of teachers in Manitoba in 1896 was 1,143; in Ontario 8,158; in Manitoba 585 men were in charge of schools, and 558 women; in Ontario the numbers were 2,695 men and 5,465 women. In Manitoba the average salary paid in rural schools was \$411.85, in Ontario the average salary was for men \$408, and for women \$298 including cities, towns, etc. Not infrequently we find such as the following in our public prints:—

“Teachers wanted for—school, salary \$250.” We in Ontario are expected to be proud of our school system. Yet such advertisements as the above are not uncommon in our newspapers. Just think of it! A man or

a woman whose education, if he or she is at all qualified for such a position, must have cost many years of hard study, and hundreds or thousands of dollars wanted at considerably less remuneration than that of a washer-woman! And yet this is not the worst. In hundreds of cases the advertisements read, "state salary expected," which has the effect of a Dutch auction, giving the most responsible and important position of moulder of the characters of young Canadians during the most susceptible period of their lives, to the lowest bidder. What does the reader suppose is the average age of the ten thousand or more teachers in the public schools of Ontario? According to a recent statistical calculation, it is not far from twenty-six.

Let our readers ponder over the above facts, and think what do these facts indicate. Is it possible, we ask our thoughtful men and women, to have the services of men and women of spirit and power for such salaries? Is there any investment which a parent can make all the year, to be compared with a competent and experienced teacher for his child: monies, lands, securities, will, many a time, involve bitter memories, or pass away, but the memory of a good teacher remains for life and doubtless beyond and is fruitful for all good works. The Canada EDUCATIONAL MONTHLY has always pleaded with the country to treat its teachers considerately, even generously and the country's reward will be above rubies.

In a late article, our contemporary, *The Educational Review*, makes out an indictment against the schools of St. John, New Brunswick, which though formulated in a mild tone, the citizens of that town cannot very well afford to overlook. And not only St. John, but several other cities of our Dominion, might take a hint from what our *Confreres* says: "There is

in the latter city (St. John) more of what we term educational waste. Its schools take up a new idea or subject, pursue it eagerly for a few weeks or months, and drop it. A few years ago the teachers were instructed in the Tonic Sol-fa system at the trustees' expense. Little attention is now paid to that system. Again, clay modelling was entered upon vigorously for a time. It, too, has gone. The departmental system of instruction was pursued in the high school. A return has been made to the old system of each teacher attempting to teach all the subjects of his or her department. Meetings of teachers were once regularly held in which special subjects were taught by teachers well versed in those subjects, or by specialists. That, too, has lapsed. One man fills two offices—principal of the high school and city superintendent. That would do for a country town of four or five thousand inhabitants, but not for a city of 45,000. Here are some examples of educational waste, and we might cite others. They do some of these things better in Halifax." And though comparisons generally are not looked upon with favour, the editor proceeds to make one all the same between the two rival cities of the Maritime Provinces. "Again," says he, "there is a very good manual training school in Halifax, where hundreds of boys receive instruction, and there is a cooking schools for girls. There is a well-conducted kindergarten school in Halifax and another in Dartmouth. St. John is at present without any of these appliances of modern education. The meetings of school trustees in Halifax are open, not only to the press, but to any one interested who may choose to attend. The chairman is elected yearly by the votes of his brother commissioners, and it is an office to which any commissioner may aspire. In St. John the chair-

man is appointed by government and holds office for four years, and meetings are not open to the press."

The teachers of the Dominion are after all not to be precluded from judging for themselves of the respective merits of some of the school histories submitted to the judges in the late Canadian History Competition. When certain defects of the book finally selected were pointed out by one of our educationists in the Montreal Convention, the self-appointed secretary of the commission made a personal matter of the criticism and threatened the critic with a law suit, or something of that kind for uttering anything but the highest praise on the work the judges had chosen. The arguments he chiefly used were that the book was a cheap book, since it cost only fifty cents, and must be a good book, for the judges were good men. But what will the indiscreet secretary say, or what law-suits is he going to threaten to throw at our teachers' heads should they continue to institute a comparison between the selected text-book and Roberts' History in

favour of the latter as they are already beginning to do, or what ecstasy of indignation is he going to indulge in should Calkin's History (one of the books entered in the competition and now in the press) come to be preferred in Nova Scotia to both of them. The author of Clement's History and its publishers should place the secretary of the competition under surveillance, or rather should induce him to spend his spare time in preparing an audit sheet of the expenses of the commission and let our teachers judge for themselves as to the merits of the book the judges selected. They are busy comparing Clements' and Roberts', and when Calkin's appears they will be in a position to say whether the judges did their work of selection well or not, outside of Mr. Patterson and his threats of law suits.

Akin in spirit to an editorial of last month is the paper by Fidelis from the *Westminster*. In our opinion both these indicate the line of improvement most needed, one which has been much overlooked for years. It is high time we should mend our way in this regard.

CURRENT EVENTS AND COMMENTS.

The keen competition in foreign markets, which is now being encountered by the British manufacturer, has once again directed attention to the very excellent system of technical education which has proved one of the most potent agencies of success to his German rival. As is well known, a course of elementary education is compulsory throughout Germany. It is otherwise, however, with the technical branches of education, the study of which is left voluntary. As, however,

workmen who wish to qualify for the position of foreman in a factory must needs be provided with a certificate of technical efficiency, very large numbers of artisans and other workers attend either day or evening classes to obtain the necessary instruction. For the most part the technical institutes are supported partly by the exaction of small fees from the pupils and partly by grants from the state. In some instances students are only admitted after they have worked for

two years at the trade they propose following. There are special schools or courses for the teaching of agriculture, textile manufactures, building trades, mechanical engineering, chemical technology and the like. In some places classes are held on Sundays for the benefit of those workmen who cannot attend during the week, either by reason of all their time being occupied or because of the distance at which they live from the institute. That these educational advantages have enabled the manufacturing population of Germany to overtake and in some cases surpass the British workmen in various industries is undeniable.

During the last forty years great strides have been made in England by the establishment of local art and technical classes in connection with and under the control of the Science and Art Department at South Kensington. These classes are, as a rule, well attended, but, except as regards the art and designing teaching, the latter is largely theoretical, and the designation "technical" seems to be somewhat misapplied. The German schools are essentially practical, and there is no difficulty apparently in obtaining a full attendance of students. The British workman, on the other hand, has a deep-rooted aversion to sacrificing any portion of his leisure to the task of improving his knowledge or practising new devices in his business, hence, of the numerous pupils at the classes of the science and art department, comparatively few are actual workmen, while, as noted above, it is generally a "sine qua non" at German technical schools that the student should have some manual experience as a tradesman before being eligible to admission. One result has been that within a very recent period German firms have become competitors against old-established British companies for the supplying of foreign

markets with locomotives, steam engines, engineering tools, and so forth. Again, the manufacture of hosiery, which was formerly a staple trade in Nottingham, has now to a large extent been monopolized by Saxon weavers, who are enabled by their skilled training to give better workmanship, improved designs and a cheaper finished article. This statement is equally true of glove-making, a business which has literally been destroyed in Nottingham through German competition.—*Montreal Witness*.

There were three great elements of education. First there was information which would be directly useful for their career in life. Then there was the element of training—those subjects which they taught not for their direct use, but because they exercised the reasoning powers of the mind, because they were to the mind what gymnastics were to the body. Then in the third place there was culture. Under that head he included not merely the refinement of taste which was brought about by the study of the arts, but the mental improvement which followed the reading of all that was best and loftiest in literature, and they might add to that the study of history, which enabled them to form their own ideas upon political and social subjects.—S. James, Head Master of Rugby.

THE WESTMINSTER CONFESSION.

OUR Presbyterian brethren have just been commemorating in meetings, and by lectures and addresses, the 250th anniversary of the adoption of the Westminster Confession by the Church of Scotland. As English Churchmen, who desire to see a drawing together of the

churches of England and Scotland, we ought certainly to be anxious to acquaint ourselves better with the history and doctrinal standards of those with whom we would have closer relations. Certainly the ignorance which prevails and the gross misrepresentations of the doctrinal standards of other churches which find a place in some of our "church papers," are not conducive to friendship, much less to unity.

Then there are special points in the origin and history of the Westminster Confession which ought to commend it to the study of English Churchmen. The great Assembly to which it owes its existence was summoned in 1643 by the authority of the English Parliament. It was intended to include all parties in the English church, except the extreme High Church or Laudian, whose sacerdotalism and despotism had been the chief cause of the troubles in Church and State. All its members, with few exceptions, were in English orders; the great majority of them were not averse to a moderate episcopacy upon the lines laid down by Archbishop Usher. Among the Episcopalian members recommended by Parliament were Archbishop Usher, Bishops Brownrigg, Westfield, and Prideaux, and five doctors of divinity, two of whom afterwards became bishops.

Unfortunately most of these were excluded from attendance by the king's command. Dr. Heatley was the only one who was present throughout. Archbishop Usher is said to have been present upon one occasion, but upon doubtful authority, and his influence appears throughout the Confession. As Schaff observes: "In England Episcopacy and the Prayer Book were identified with the Reformation and Protestant martyrdom, and hence were rooted in the affections of the people." Had the

Episcopalians been permitted to remain, and had not their abstinence been followed by the influx of the strong Scottish influence, embittered against Episcopacy by Laud and the star-chamber, the probability is that the Assembly would have declared in favour of Episcopacy.

But while the members of the Assembly differed in their views of Church government, they were doctrinally united. They were Augustinians or Calvinists, but not of an extreme Supralapsarian type. The first intention was to revise and enlarge the Thirty-Nine Articles, but after ten weeks, in which fifteen of the Articles were revised and adopted, the revision was suspended in order to take up the subject of Church government. Through Scotch influence it was not resumed, and a new Confession was resolved upon. But this new Confession was largely based upon the Articles of the Irish Church. These Irish Articles, one hundred and two in number, were drawn up by Archbishop Usher. He incorporated in them the substance of the Thirty-Nine Articles; and they received the formal sanction of the first convocation of the Irish Church. These Articles formed the basis of the Westminster Confession which follows the same order and embodies very largely their phraseology. Dr. Hoyle, Archbishop Usher's friend, and Professor of Divinity at Dublin, was a leading member of the committee of the Westminster Assembly which drew up the Confession.

Thus we see that the Westminster Confession is closely related to our Thirty-Nine Articles. It embodies the substance of the chief doctrinal Articles. The fuller and more definite and pronounced statements of the Confession are taken from the Irish Articles of Archbishop Usher, who, like Bishop Jewel, the final editor of the Thirty-Nine Articles, was a doc-

trinal Puritan. In the doctrine of the Sacraments the Confession does not differ a hairbreadth from the doctrine of our Articles and that of the venerable Hooker. In the great doctrines of God, the Trinity and the Person of Christ, it reasserts the doctrines of the ancient creeds, but in a more complete form. The chief difference will be found in the doctrine of the Divine Decrees and the mysteries of the Divine predestination. On these points our Articles are of the type of the more moderate and cautious Augustinianism of Cranmer, Ridley, and Latimer. The Westminster Confession gives a more scholastic and elaborate presentation, but it is noteworthy that on these points it follows most closely the Irish Articles, whose very wording is largely adopted. Those who talk so superciliously of this historical document ought to read Dean Stanley's eloquent eulogy of it, an expression of admiration all the more remarkable because it proceeds from one who had but scant sympathy with much of its doctrinal teaching.

E. V.

ASTRONOMICAL NOTES— JANUARY.

THOS. LINDSAY, TORONTO.

THE present month is quite noticeable for the lunar phenomena presented, and the observer who follows the moon throughout this lunation will be certainly repaid. On the 7th of the month there is an eclipse, interesting on account of the small part of the disc that is immersed in the earth's shadow, about one-sixth; the first contact occurs at 6.47 p.m., and the series of ring-plains that form such prominent features of the moon's south polar regions will be seen, one by one, to be darkened by the umbra. On the 14th, a day be-

fore the last quarter, the moon passes south of Jupiter, both coming to the Meridian at about the same time, five o'clock in the morning. On the 18th the slender crescent of the waning moon, far south, passes below Saturn, and on the 20th the keen observer may get our satellite in the same telescopic field with Mars. The total eclipse of 21st January is, of course, out of our way, but several expeditions have been arranged to go from England to the west coast of India, where the duration of totality will be greatest. It is evident that the interest in phenomena of this kind is far from dying out, when steamship companies make special rates for astronomers and others who wish to journey some thousands of miles to see the sun's corona for about two minutes. Our time will come soon, we can patiently wait till May, 1900, and then arrange for an expedition to the Southern States.

On Jan. 30th about midnight there is an occultation of the Pleiades by the moon, and the only one of the year visible in this locality. Apart from the interest which the motion of the moon has for the mathematician, there is always a field for the amateur to sketch the more prominent features of the disc. At the present time the great observatories of Paris and Mt. Hamilton are making photographs of the moon on an enlarged scale. The reproductions are beautiful, yet one must still feel that the picture is not—the moon. The most perfect photographs fall immeasurably short of the telescopic view, and in many respects are inferior to skilful drawings.

Mercury will be at its greatest elongation west of the sun on the morning of Jan. 28th. The difference is twenty-five degs., but the declination of the planet is far south, consequently it will be low in the horizon and not easily seen. Venus will be

quite too close to the sun to be easily visible; we must wait now till the fall of the year to see the planet as a brilliant evening star. Saturn is still passing south, but the angular diameter of the disc is slowly increasing, while the system is broadly in view. The elevation of the Earth above the plane of the ring is 26 degs. Jupiter is also increasing in apparent diameter and rising at a more convenient hour. Towards the end of the month the planet rises at 10 o'clock. The phenomena of the satellites, which are calculated generally to minutes only, are given with great exactness in the cases of eclipses. For example, on January 25th at 11h. 17m. 11s., Washington time, the fourth satellite reappears from eclipse, starts into view out of the planet's shadow suddenly, like a new star. The computers of the ephemeris are pretty sure of their ground when they name seconds. The calculations for the satellites are made by Prof. H. D. Todd, of Washington. The observer need only have his watch carefully corrected and his telescope in order, to prove the marvellous accuracy of these predictions. The disappearance into the shadow on that evening occurs before the system is above the horizon for observers here.

During the discussions on the new Education Bill of Quebec, it was pointed out by the Premier that free tuition was not a matter to be considered until the finances of the province were in a more prosperous condition. It is very pleasant, however, to learn from the Chairman of the Protestant Board of School Commissioners of the City of Montreal that there are hundreds of children belonging to the schools under the supervision of that Board from whom fees are not required. The following is his statement in full: "Rev. Principal MacVicar, Chairman of the Protestant

Board of School Commissioners at their monthly meeting this morning, referred in an informal manner to the remarks recently made in the press in reference to some cases of children of poor parents being compelled to go without any educational training on account of the inability of their parents to provide the necessary funds. He remarked that the situation seemed to be greatly misunderstood in some quarters. There were, he said, a large number of children educated by the Protestant Board free of charge, and regular blanks were procurable, which, upon being filled in by a clergyman or any responsible citizen, attesting to the indigency of the case, secured to such children all the educational privileges of other pupils. The records were then looked up in connection with the informal discussion, and it was found that of the 8,000 children attending Protestant schools, over one-sixteenth of that number are educated free on account of the poverty of their parents." In this connection Mayor Wilson Smith remarked that no poor children are debarred from the Protestant Schools. He thought that the subject was very much misunderstood, judging by the remarks which had been made in reference to some cases which have recently come to light.

The annual report of the Protestant Board of School Commissioners has been issued, and contains many items of interest to the general public. It gives the number of schools under the control of the Board as fifteen; with an actual attendance of 7,706 pupils, or, including the McGill Model School and the Baron de Hirsch Institute, 8,472 pupils. The receipts on income account for the year ending June 30th, 1897, amounted to \$218,429, and the disbursements, \$205,373. Of the receipts, \$153,786 were derived from the city school tax,

\$34,732 from High School fees, and \$22,508 from jubilee school fees. Of the disbursements, \$151,685 were expended in maintaining the various schools, and \$22,400 went to pay the interest on bonds.

The *Oxford Magazine* publishes some interesting figures to show that the old universities are holding their own in supplying useful candidates for the various civil service examinations. Out of one hundred successful competitors for Home, Indian and Colonial posts, no fewer than eighty-six are Oxford and Cambridge men. Oxford is far ahead with fifty-seven, the light blues scoring twenty-nine

places. The second notable point proved by the statistics is the diminishing influence of the "crammers," who "seem to be settling down more and more into the position of supplements rather than of substitutes for ex-university training." Only two candidates out of the hundred remained for three or four years with the special trainer. It is also worthy of remark that the athletes are well to the fore, with three football "blues" and a long list of cricketers, footballers and oarsmen who have represented their colleges. The examiners have expressed themselves as highly satisfied with the average physical calibre of the successful candidates.

SCHOOL WORK.

SCHOOL-BOY BLUNDERS.

THERE are several ways in which the common blunder of a school-boy may be taken; several points of view from which it may be regarded. We have noticed of late a somewhat disquieting tendency on the part of certain periodicals to exploit this subject as a branch of literature. In such cases the writer (usually a school inspector or examiner) takes up, as a rule, a rather pharisaical position. He introduces his anecdotes to us with a covert sneer. He stands on a plane above and totally separate from that of the unfortunate culprit whom he holds up to ridicule. He is, in fact, a superior person, and he gives you to understand, by implication, that he himself could never at any time have perpetrated any of the solecisms he describes. We are quite prepared to believe him. To make a good, a really delightful blunder, certain qualities are necessary. It is not, as is commonly sup-

posed, your dull boy who perpetrates the truly comic reply. Now and again, led by some blind chance, he may possibly stumble upon a happy mistake, even as a dull man may be choicely sarcastic unawares. But to delight the hearer for all time with that blending of the audacious, the unfortunate, and the unexpected, requires little short of genius, and genius is a quality but rarely discoverable by school inspectors and their like. Good, worthy men, they despise what they cannot understand; they hold up to shame words they themselves would have never had the wit to utter.

Our standpoint, then, shall be a different one from this. We would approach the subject curiously, but sympathetically. Indeed, few processes are more interesting to trace than the working of the human mind towards the solution of any problem. How marvellous often is the ingenuity we see displayed! How indomitable the resource! Hampered as he is by

difficulties, reduced for the most part to the stony path of mere intuitive perception, often to no path at all—with nothing, as we say, to go upon—nevertheless shall we see the sturdy British youth overcoming all obstacles, evolving from somewhere or other a plausible working hypothesis, and ultimately producing in triumph to his question (no matter how ignorant of the subject he may be) an answer of some sort or other. Truly the boy who can accomplish this may be said to display, if not genius, at least ingenuity. Certain sterling qualities are his—self-confidence, pluck, readiness, and a sanguine love of attempting the apparently impossible. Such a boy is not likely to fall behind in the race for wealth and honours; and yet, so singular are the ways of men, we find him often receiving kicks rather than halfpence, a dose of sarcasm (good-humoured at the best) instead of hearty praise. “Hamlet,” we remember hearing a boy say on one occasion, “is the leg of a small pig.” Observe the simplicity, the neatness of this reply, betraying also a reasonable share of knowledge. No boy who could make that answer could be altogether a fool. He possessed the information, not universally known, that the suffix “let” betokened a diminutive. In fact, a reasonable degree of literature is indispensable for most of the blunders at which we are asked to mock. Old heads cannot be looked for on young shoulders, nor can we reasonably expect our pupils to become perfectly wise at one plunge into the educational bath. Imperfect information is not a crime. “The Nile,” another boy has said, “is the only remarkable river in the world. It was discovered by Dr. Livingstone, and rises in Mungo Park. The mistake is natural enough; the information displayed is unusual, yet some such slight confusion is enough to set our wiseacres laughing

with complacent contempt. Again, “bungalow” is not a word one often meets with at a tender age. To confuse it with “punkah,” is not only natural, it is even creditable; yet the boy who defined it as “a machine for pumping air into a house at night,” was not improbably punished for his attempt at translation. So, too, a “gudgeon” might very well be a “policeman’s staff,” or a “quarantine” a four-masted ship” in the eyes of boys whose acquaintance with bludgeons and brigantines had, fortunately for themselves, been limited. We might instance scores of similar definitions, the only fault of which lay in a knowledge not yet made perfect; but we have mentioned sufficient, we fancy, to make out our contention. It is not our wish to enter into competition with the common run of jest collectors, though it is true—and sad—that such miscellanea of mistranslations and misunderstandings are popular with the reading public of the day. That this should be the case is surely something of a reflection on the morals of magazine consumers, for it is obvious that the sole reason of this popularity is pride. To be able to assume an attitude of mental superiority, to chuckle softly to oneself at the extraordinary mistakes these half-educated boys can make, this seems to us to be the chief cause of the public’s delectation. It may be thought, perhaps, that with the rapid spread of our modern system of free education we shall hear less of these unfortunate mistakes. Surely, with all our new apparatus for cramming the youth of the country with science as they cram chickens for the table, with our codes and timetables, and ceaseless schedules, and much-harassed inspectors, our boys will soon be too well informed to perpetrate such remarkable errors as we have noticed. This would be a sorry summation to the noble project of a

free and universal education. As things go, this world is a serious place enough, and we can have no desire to see another source of innocent gaiety eclipsed. Fortunately, however, there is no real danger; in fact, we are inclined to think that the present system is nearly the most effectual that could be devised for securing a continuity of our glorious traditions in this respect. Year by year more subjects are introduced into the crowded syllabus; year by year the unhappy teacher has to essay a wider flight. "A little of everything" is the motto of our friends in authority, and a superficial smattering of many sciences is the best way possible to procure a sufficiency of amusement. As years go on, then, we predict that the supply of laughable mistakes will increase rather than diminish. If the present *régime* continues, it may soon be impossible for any inspector who wishes to preserve his reputation for seriousness and gravity to undertake the examination of a Board School. For it is confusion that breeds blunders of this sort, far more than mere stupidity, and confusion is best served by a too indiscriminate variety in teaching. We may congratulate the Education Department upon having entered so warmly into the true spirit of the business. In formulating measures for increasing the flow of harmless mirth they have deserved well of all—and in particular of those who read the magazines. We can only hope that the pupils will not be backward in performing their part, but on that point we have little misgiving. The British boy is soundly conservative and faithful to his traditions; the circumstances are now exceptionally favourable, and we can look forward with confidence to a rich harvest.

What we have said should not, perhaps, be taken too seriously. It is by no means our wish that the youth

of our schools should set themselves, in consequence of a few words, to producing a crop of such answers as we have quoted. Such a course would be possibly amusing, but would also carry with it a certain amount of danger; and we cannot advise any boy in good faith to attempt making havoc after this fashion of his next examination paper. We have urged our theory rather in protest, perhaps half in earnest, against the usual spirit in which the outside public regard such solecisms; and we have been led, incidentally, into an animadversion against the policy to which so many of these solecisms are due. A wise man will not laugh lightly at another's mistakes, knowing full well that he himself is not secure from error; or, if his sense of humour be too strong, and the ludicrous prevail, he will, at any rate, laugh gently, not scornfully; so that, should at any time the tables be turned upon him, he may have some ground upon which to claim forbearance from others.—*Evening Standard.*

SCIENCE.

J. B. TURNER, B.A., EDITOR.
COLL. INSTITUTE, HAMILTON.

AN EXPERIMENT IN EDUCATION.

QUITE recently a most interesting book with the above title was published by Harper Bros., New York. In it Mary R. Alling-Aber, the authoress, gives an account of an experiment conducted by her in a private school in Boston, and also discusses the ideas that inspired the experiment and the ideas inspired by it.

Part I. of the book is in two chapters. The first contains an outline of the work undertaken during the course of the experiment and the manner in which the work was conducted; the second deals with an experiment on similar lines at Engle-

wood, now a part of the City of Chicago. It is impossible in a short notice, such as the present, to give even an outline of the work and the manner in which it was carried on, but the results can only be described as marvellous.

There are numbers in our province who are actively engaged in trying to secure the extension of Nature Studies in our primary schools; to these the results achieved during the progress of this experiment will be an incentive to continue the work they have undertaken.

Interesting as this part of the book is, it is yet surpassed in interest by Parts II. and III., the first of which deals with the "ideas underlying the experiment," the second treats of "some details about the teaching of special subjects." The ideas underlying the experiment are well expressed in the following sentences taken from the title-page of Part II.: "The one clear thing there was that children must be at once introduced to real knowledge, be given something worth their efforts, and treated as rational, natural human beings, who ought not, even if they could, be made to greatly care for the symbols and shows of learning in the absence of the real substance, nor led to imagine that they are being mentally and morally nourished—that is, educated—when fed on chaff mainly."

The special subjects dealt with in Part III. are Science, History, Literature, Language and Mathematics, and each one is treated from the standpoint indicated in the preceding part.

The book, as a whole, is one of surpassing interest, and whether we agree with the principles laid down in it or not, we are, at least, by a perusal of it, made to look over our pedagogical stock-in-trade, and for this reason, if for no other, every teacher will find it a valuable addition to his library.

BOTANY.

FORM I.

A.

Examine, with the aid of the textbook, the plant submitted, and show the steps by which you determine its (a) order, (b) genus, (c) species.

B.

1. Give (a) the order, (b) the genus, (c) the species of the plant submitted.

2. Describe (a) its stem, (b) its leaves.

3. Describe the different parts of the flower, illustrating your answer by drawings.

4. What are the general characters of (a) Leguminosæ, (b) Rosacæ? Mention the special points in which the flowers of these two families differ from each other.

5. Describe (a) a strawberry, (b) an apple, (c) a rose-hip, mentioning especially the points in which they differ.

6. State the points of difference between (a) a root and a stem, (b) a rhizome and a tuber.

FORM III.

A.

Examine, with the aid of your textbook, the plant submitted and show the steps by which you determine its (a) family, (b) genus, (c) species.

B.

1. Describe (a) the stem, (b) the leaves, (c) the flower of the plant submitted.

2. (a) Define the terms *hypogynous*, *perigynous*, *epigynous*.

(b) Illustrate your definitions by drawings.

3. How are Monocyledons dis-

tinguished from Dicotyledons by (a) stems, (b) leaves, (c) flowers?

4. Describe the following forms of inflorescence:—(a) Corymb, (b) Umbel, (c) Raceme, (d) Spike, (e) Head, and show how these have been derived from a single form.

5. Describe how leaves are modified (a) for securing and utilising animal matter, (b) for the storage of reserve materials.

6. Describe the different forms of subterranean stems.

7. Describe a fern under the following heads:—

- (a) Frond or leaf.
- (b) Sporangia and Spores.
- (c) Mode of fertilization.

ONTARIO NORMAL COLLEGE NOTES.

THE Christmas sessional examinations, which were held on the 16th, 17th and 18th ult., necessitated a general review by the students, of their non-professional work. On the whole the papers were satisfactory, although in a few cases, complaints were made of the indefinite character of the questions.

About fifty students wrote here on the final examinations. The paper on psychology was the cause of much dissatisfaction, as the educational side of the subject was given very little prominence.

A successful open meeting of the Literary Society was held on the evening of the 4th ult., in the Assembly Hall. The leading feature of the programme was an address by Dr.

McLellan on the "Ethical Content of Literature," showing how character in its triune aspect of intellect, feeling and will, is developed by the study of Literature. The chair was occupied by the Vice-Principal R. A. Thompson, B.A.

Each teacher-in-training has taught, at least, two lessons. This represents between 500 and 600 lessons all together taught to the students of the Collegiate during the fall term.

The holidays will be brightened by the perusal of the O.N.C. Christmas Magazine, a souvenir publication of the Literary Society. It contains besides instructive papers by members of the staff, several witty and interesting essays by individual students.

The seating capacity of the college was increased in the fall without provision being made for increased ventilation. Both lecturer and students find it hard to pay attention to the work in hand, owing to this defeat, which can only be remedied by enlarging the amphitheatre.

Whilst reviewing the work of the term, the opinion was expressed by more than one student, that a preliminary course on the training of memory and on the analytic synthetic method in dealing with the divisions of a subject, should be given to all pupils in the higher forms of the Collegiate and to those beginning university work. By the application of a few of the main principles of these, a vast amount of cramming would be dispensed with, and result in a well developed memory.

The January term begins on Tuesday the 11th.

CORRESPONDENCE.

POST-GRADUATE COURSES.

PRESIDENT LOUDON WRITES ABOUT
THOSE AT TORONTO UNIVERSITY.

To the Editor of the *Gazette* :

SIR,—My attention has been called to the following paragraph which appeared in your issue of the 17th inst. :—

“The abandonment of the post-graduate courses at Toronto University for lack of support is a serious reflection on the usefulness of that institution. That out of the hundreds of graduates the University turns out every year only two should think it worth while to continue their studies beyond the limited courses required for a degree seems to indicate a deplorable lack of the desire for knowledge. A diploma does not signify that a man knows everything, but that he has been taught how to learn. A university whose students do not want to learn anything more must be set down as a partial failure.”

I may remark that I was very much surprised, not only by the erroneous nature of the statements contained in this paragraph, but also by the very unfriendly nature of the inferences based thereon. With your permission, I desire to refer briefly to the matter in your columns.

1. The regular courses of instruction on the part of our faculty are limited to the work of the undergraduates. Much of this work is, however, of such an advanced character that it corresponds to what is styled post-graduate work in many of the universities of this continent.

2. We have quite recently established the degree of Ph.D., for research work. An essential condition for the awarding of this degree is that the

candidate shall publish an approved thesis embodying the results of an original investigation. No regular courses of instruction are provided for candidates for this degree, as it is assumed that they will be competent through previous training to proceed with their work with only occasional advice and assistance from their professors. At least two years' attendance and study at a university (one of which must be at the University of Toronto), are also required. The standard for the degree is so high that the number of candidates will in all probability not be large.

3. For some years we have had students returning to us after graduation for the purposes of further study, even though we have not had heretofore the inducement of a doctor's degree to offer them. They still come to us, and their numbers are increasing annually. Last year we had fourteen such graduate students. This year we have already in all twenty-nine graduate students. Of these, four have registered for the degree of Ph.D., and are regularly proceeding with their work; fifteen are doing research work which will count for the degree of Ph.D. if they decide to register; whilst ten are taking undergraduate courses, thus supplementing the knowledge already required of them at their B.A. examination.

4. It is but fair also to our graduates and to the university to state that in addition to these twenty-nine graduate students, a large number of our graduates have obtained their Ph.D. at foreign universities, and many are pursuing their studies abroad, with this object at present. Last year to meet a charge similar to the one now being dealt with, I gave to the press a list of over eighty of our graduates who, within the previous three years,

had obtained fellowships, scholarships, or teaching positions in universities of the United States. Of this list many who held fellowships, etc., were proceeding to the doctor's degree, as indeed many others also were though not included in the list. In the present year about a dozen of our graduates are taking Ph.D. work in Chicago University alone, and of these seven hold fellowships. The facts of this and the preceding paragraph will afford a sufficient answer

to your inference that our graduates are characterized by a lack of the desire for further knowledge.

5. It is almost unnecessary to add that your assumption as to the abandonment of post-graduate courses at this university is entirely without foundation in fact. No such step has been taken, nor is any such step contemplated.

J. LOUDON,

President, University of Toronto.
Dec., 1897.

CONTEMPORARY LITERATURE.

Although the *Atlantic Monthly* does not in appearance make any special effort for Christmas the December number nevertheless is a notable one. In fiction it would be hard to surpass at this time Hopkinson Smith's "Caleb West," or Kate Douglas Wiggin's "Penelope's Progress." Mr. Fuller also contributes a short story entitled "The Greatest of These." But it is to a contribution so penetrated with the atmosphere of its subject that one almost hesitates to call it fiction that one must turn to find the most remarkable feature of the number. The name of the paper is "From a Mattress Grave," and it is an account by Mr. Zangwill of the death bed of Heinrich Heine. It is announced that the Canadian, Mr. Gilbert Parker, will in the coming year contribute another serial to the *Atlantic*, to be called "The Battle of the Strong."

Anyone who wishes to re-capture that most elusive true spirit of Christmas would do well to give half an hour to reading Merry Christmas in the Tenements by Jacob A. Riis which is to be found in the December number of the *Century Magazine*. W. Lewis Fraser and John C. Van

Dyke contribute the usual valuable papers on art which have become a feature of the *Century*. Mrs. Burton Harrison's "Good Americans" is continued. This is a fair example of the modern fairy tale evidently believed in by the author. It is perhaps entertaining and possibly moral. Of quite a different character are a number of excellent short stories, everyone of which might be mentioned for good workmanship and happy conception. "Gallops" by David Gray, who also contributed to the November number, strikes a new and exciting note for outsiders in horses.

One of Blackwood's famous short stories is reproduced in the *Littell's Living Age* for December 18th.

The Christmas Isle is the name of the first article in the December number of *Table Talk*. The place is near Java, it would appear from the article in question, but reading it you will find that the world has had more than five years of Christmas Days and that requires a thoroughly retrospective survey before one can leave it. The author of the paper, Lucy Eliot Keeler, deserves much for hav-

ing discovered such an interesting fact in our history.

"Poor Chola" by Julia P. Dabney is the complete novel in the December number of *Lippencott's Magazine*. Among the advertisements will be found scattered the usual cheerful jokes that do much to keep men sane. There is a particularly excellent one of a Christmas bear.

MacMillan's Magazine have again been fortunate in securing an interesting serial. The story is called "A Philosopher's Romance" and is written by John Bewick who has succeeded in capturing a pretty and interesting atmosphere. Other contributions are "A Cry from the Far West" by Mrs. Molesworth, "Ramizan" by Hugh Clifford, and "A Cuban Filibuster" by Harold Bindloss.

Books lately received:—"Louisburg in 1745," edited by George M. Wrong. William Briggs, Toronto. "Mabel Gray and Other Poems," by Lyman C. Smith. William Briggs, Toronto. "The Story of a Sand-Pile," by G. Stanley Hall. Kellogg & Co., New York. "Tim and Mrs. Tim." The Toronto News Company, Toronto. "The Elements of Natural Philosophy," by E. J. Hous-

ton. Eldredge & Brothers, Philadelphia. "Lincoln Literary Collection," J. P. McKaskey. The American Book Co., New York.

From MacMillan & Co., through their Toronto agents, The Copp, Clark Co., Toronto: Parts 21 & 22 of "The History of Mankind," by F. Ratzel; "Physiography for Advanced Students," by A. T. Simmons; "Macaulay's Lays of Ancient Rome," edited by W. T. Webb; "Elementary Latin-English Dictionary," by G. H. Nall.

How much we owe to Arnold of Rugby! * Not only the British subjects in the Central Empire, but we also, British subjects in the Western Empire, and wherever the English language is spoken, have profited by the inspiring influence of the great schoolmaster of Rugby. We have read this life with much interest and profit. Our highest praise of it must be that we strongly advise every teacher to get a copy and read it for himself. *Vixere fortes, ante Agamemone*: Let us remember.

* "Arnold of Rugby: his School Life and Contributions to Education." Edited by J. J. Findlay, M.A., late Scholar of Wadham College, Oxford, Principal of the College of Preceptors' Training College. With an Introduction by the Lord Bishop of Hereford. Cambridge: at the University Press.