The Institute has attempted to obtain the best original sopy 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.Coloured cejvers/
Couverture de couleurCovers damaged/
Couverture endommagée


Covers restored and/or laminated/
Couverture restaurée et/ou pelliculéeCover title missing/
Le titre de couverture manqueColoured maps/
Cartes géographiques en couleurColoured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)Coloured plates and/or illustrations/
Planches etiou 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

$\square$
Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
II se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible. ces pages n'unt pas été filmées.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-étre uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent $3 x i g e r$ une modification dans la méthode normale de filmage sont indiqués ci-dessous.

$\square$| Coloured pages/ |
| :--- |
| Pages de couleur |


$\square$| Pages damaged/ |
| :--- |
| Pages endommagées |


$\square$| Pages restored and/or laminated/ |
| :--- |
| Pages restaurées et/ou pelliculées |

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquéesPages detached/
Pages détachées


Showthrough/
Transparence


Quality of print varies/
Qualité inégale de l'impression


Continuous pagination/
Pagination continueIncludes index(es)/
Comprend un (des) index

Title on header taken from:/
Le titre de l'en-tête provient:


Tiice page of issue/
Page de titre de la livraison

$\square$
Caption of issue/
Titre de départ de la livraison

$\square$
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.


## THE CANADA

# EDUCATIONAL MONTHLY 

## AND SCHOOL MAGAZINE.

MARCII, 1889.

## ENGLISH AT JUNIOR MATRICULATION.

BY SIR DANIEL WILSON, LL.D., F.R.S.E., PRESIDENT OF UNIVERSITY COLLEGE.

T
'HE importance of " English," and its true place in a liberal education, are questions which have received a large amount of attention recently from leading educationists; and a very laudable desire has been manifested by some of the best men among our school inspectors, and the teachers of Canadian Institutes and High Schools, to secure for the study of the English language and literature a greater share of attention than it has hitherto received. This movement cannot fail to commend itself to all who are interested in higher education. It is an encouraging manifestation of intelligent sympathy in this important department of general education, at a time when the city of Toronto has furnished the endowment for a special chair of English Language and Literature in the University. At the same time I recognize in all this only the latest steps in a progressive system of improvement; for there was a time, in the early years of the University, when even the test of accurate orthography could not be
rigidly enforced on the candidates from country Grammar Schools, without involving the rejection of nearly all.

But it is possible to be in hearty sympathy with the aims of educational reformers, and yet differ from them as to the best means for accomplishing the end in view. The cry at present is for a high standard at the annual University matriculation examinations; and with this view examinershave aimed at making the papers forjunior matriculation, not only more difficult, but, as it seems to me, more obscure and puzzling. It would beinvidious to refer to particular papers, or quote special questions. But in recent years I have looked carefully over the papers prepared: not for Normal School candidates for a teacher's first class certificate ; but for hundreds of nervous boys and girls of fifteen or sixteen years of age, required in the brief term of a couple of hours to study and elucidate obscure grammatical questions. Many of them deal with per-
plexing niceties of grammar, which may be a useful kind of intellectual gymnastics in the school room; but which I am certain no speaker or writer consciously applies in the daily uses of language, even for the highest purposes of oratory or composition. Other questions I should designate purely subjective. That is to say, they are such as a teacher may legitimately submit to his own class in order to test how far the pupil has understood his teaching, and comprehended whatever he may have thought fit to impart as useful training. But such questions are out of place in an examination of candidates trained widely apart under many different teachers. They are no true tests of knowledge. By the pupil who has chanced to have the advant. age of the special training they will be answered with ease; while to his equally gifted neighbour in the examination hall they may prove a hopeless riddle. As an author for more than half a century, apart from my experience as a teacher, I may perhaps without undue assumption, claim some fair knowledge of English. But I have looked over the junior matriculation papers in recent years, and found some of the questions obscure riddles. I could only dimly guess what the questioners aimed at, and comforted myself with the reflection that my own matriculation trials were over. A curious confirmation of the puzzling aspect of those matriculation questions has most opportunely come to hand at the very time of my receiving the proof sheets of this paper. A correspondent of the Mail of February 15 th, writing under the pseudonym of "Studiosus Literarum," and claiming an intimate familiarity with the examination work in the Education Office, thus writes: though, as will be seen, with no apparent realization of the very curious signifcance of his revelations:
"If any evidence of the gencrally unsatisfactory results of the teaching of English in University College were needed, such evidence is supplied by the fact that at the last, and at two preceding, examinations of candidates for a second and a third class certificate, the sub-examiners (several of whom are graduates of the University of Toronto) had to be 'coached;' that is to say, had to sit down and with becoming humility endeavour to comprehend Mr. -'s questions, with the vouchsafed accompanying answers 1 It is plain that such lessons at so critical a time would be received with a sense of mortification. Doubtless the only reason why these benighted University graduates submitted to so much self-humiliation was their wish to figure as examiners, at all events to grab their allowance per diem. Cannot so clever a man as Dr. G. W. Ross devise some means of relieving these poorly equipped graduates from a task for which neither their training nor their natural ability has fitted them."

Here then it is admitted that when the staff of examiners (consisting of graduates of the University, and others selected, we must presume, as competent for the work of reading and adjudicating on the papers,) met for that purpose, these supposed experts were so hopelessly puzzled that they had not only to be "coached," or put through a regular preparatory training before they could comprehend the questions; but had to be "vouchsafed accompanying answers," or, in other words, to be told the solution of what still remained to them inexplicable riddles. Nevertheless these questions are considered to be suitable tests for boys fresh from the High Schools. What sort of answers the examiners do get we learn from time to time when the veil is lifted, generally by some novice in the work of examining; and the public are invited
to marvel at their absurdity. One of the greatest difficulties experienced by all our Universities is to find judicious, capable examiners. The first papers set by an inexperienced examiner often give ne satisfaction to any one but himself; and this is preeminently the case in what might scem the simplest of all subjects, viz, English. He is bent on distinguishing himself, and quite above the consideration of anything so puerile as the mental condition of a youthful candidate under the first trying ordeal of the University examination hall.
Such marvellously fine papers, in which their authors have had far more thought for their own distinction than for the reasonable aptitudes of the candidates, under the special circumstances involved, are a grief to all who realize the true aim of such examinations. An experienced examiner learns to know how little justice a nervous young neophyte does to himself in the haste and anxiety of the examination hall; and is rather led by such answers to reconsider his own questions, and be sure that they were sufficiently clear and definite to give the candidate a fair opportunity of showing what amount of knowledge he really possessed.

My own opinion, founded on the experience of many years as an examiner, is that the fairest, as well as the surest test, is prose composition. But this must be relieved of all extraneous and mísleading conditions. The practice of recent exar:iners has been not only to name the theme; but to specify a variety of details, involving a knowledge of many points which, however proper they might be as questions in a literary examination ; only hamper the candidate, and divert his attention from his legitimate aim, viz., good English prose composition.

At the junior matriculation I shourd atiach more importance to composition than to questions on the history
of the literature ; for the former, if judiciously conducted, precludes all mere cram, and furnishes a test of true knowledge on some of the most essential branches of a sound English education. The subject named should be of so simple a character that it may be fairly assumed to place all candidates on an equality. The mere title should be given, leaving each candidate to treat it as he please. The theme may be "Our Canadian Winter:" "The Landing of the Pilgrim Fathers." "The Discovery of America by Columbus," "The Canadian Pacific Railway," or other, and if possible, more simple themes. To the subject thus specified a note should be added, informing the cundidate that he will be allowed at least a full hour for composition; that he is to write carefully, in a clear and legible hand, not exceeding, say four, or at most five, pages of quarto post, or ordinary examination paper; that his theme will be read by the examiner as a test in ( r ) orthography, (2) grammar. (3) rhetoric, (4) style, (5) punctuation.

Such a test has the advantage of removing nearly all the inequalities dependent on special modes of teaching; or on favourite subjects, or "hobbies," of certain teachers. It will enforce a habitual attention to prose composition in all the High Schools and Collegiate anstitutes; while it will furnish to the ablest teachers the very best opportunities of dealing with all the important practical questions of English grammar. If this is accompanied with a greater latitude given to the teacher in the choice of authors and subjects, selected with a view to cultivate a taste for English reading, and a critical appreciation of our best English classics, I feel assured that the change will meet the wishes of our best High School masters, and prove advantageous to their pupils. I cannot too
strongly urge the extension of such reasonable latitude to the teachers in our Collegiate Institutes and High Schools as shall leave room for the full play of capacity in a gond teacher. The mere drudge will readily comply, in a more or less perfunctory manner, with any rules formulated by the Department; and plod on in a daily round of press ribed tasks. But to any man gifted with the innate capacity of a teacher, such restrictions are impediments instead of helps. I cannot doubt that to the ablest of our High School teachers the restriction of their reading to prescribed frag. ments of authors dictated to them, is peculiarly irksome; and the limitation of examination for pupils at the close of their High School course to such texts is most objectionable. They have been drilled and crammed till they know their answers by heart, while some of them would be baffled by a like examination on any subsequent page of the same author. Some general scheme of study and examination is indispensable for the guidance both of teachers and examiners; but reasonable latitude is required for the exercise of intelligent judgment by both.

It would be unjust to our educational authorities to overlook the fact that important steps have been taken towards a greater simplification of the school programme. In 1871 no less than nineteen subjects were prescribed for the first four forms in the Public Schools, whereas they have since been reduced to twelve. Yet even now the tendency, under the influence of social reformers actuated by the highest motives, to encroach upon the limited school hours with hygienic physiology, scientific temperance, and other extraneous subjects of a like character, requires to be vety judiciously restrained ; or we shall be compelled to fall back on the simple rule of "the three R's," as the only escape from a
multiplicity of subjects, and the neg. lect of the essential elements of general education. It is a fact, of which many educational reformers seem still to be in ignorance, that the adding a subject to the prescribed programme is no guarantec that it will, or can be, overtaken in the studies of the school
Some little indignation appears to have been excited by an inaccurate report of remarks made by me at a recent meeting of "The Modern Languages Association" on certain slovenly defects in Canadian English. One, to which I was led to refer, quite incidentally, when discussing the character of the Anglo-Saxon verb, is the common confusion of the shall and will; another is the indifference to the distinction between these and those. Again, the prevalent Americanism of dispensing with prepositions seems to me to be on the increase. But besides such obvious errors, the test of prose composition cannot fail to furnish to a good teacher the best opportunities for dealing with all the essential niceties of grammar. The very blunders of the pupil supply to the teacher more useful examples on which to base instruction than he can readily find in any other way.

It may be more difficult to define a good test system of examination in English literature ; yet here also experience suggests the avoidance of obscure and minute niceties. Some examiners seem to imagine they have achieved a triumph when they hunt up some unheeded foot-note, or hit upon a little detail of history unknown to anybody but themselves. Three or four broad questions, offering to the candidate a fair opportunity of showing what general knowledge he possesses on the literary history of the prescribed period, will allow the thoroughly informed student to give evidence of his mastery of the subject; and will no less surely expose the ignor-
ance of the ill-informed idler. When the questions are numerous, and the time is brief, the most ignorant can make some reply to most of them; and the best infornied has time for little more. Whereas, with a few comprehensive questions, the idler very soon uses up all his scanty store of knowledge; while the diligent student finds time to prove his intelligent comprehension of the subject. Such a mode of examination baffles the "coach" and the whole system of "cram." The few questions permissible within the limits of a two hours' examination, if confined to minute details, furnish an unsatisfactory test. It is very much a matter of chance who shall answer them. One candidate has been reading half the previous night and missed them all. Another lucky fellow finds they are the very points he chanced to have got up. Yet the former may be the better informed and more diligent student.
Finally, let me add, a matriculation examination is a totally different thing, either from later University examinations for standing and degrees, or for first and second class teachers' certifica: The cornbination of the latter with matriculation work is cal-
culated to mislead examiners, or to perplex them in the preparation of papers adapted to such diverse purposes. The impropriety of applying the same test to a candidate for the office of teacher, and to the youth seeking to enter on the first year of a University course, is recognized in so far as different percentages are demanded in the values of their respective answers. But that is, at best, an unsatisfactory compromise. A University matriculation is designed as a test to ascertain in how far the candidate possesses the adequate preliminary training to enable him to enter successfully on the higher work of the University. If he does not, it is in his own interest, as well as in that rf the University, that he should be remanded for further preparatory training. But if he has sufficient knowledge of the prescribed studies to enable him, by diligence, to keep pace with his fellow students in the higher work on which he desires to enter, it is a wrong, and may be a grave injury, to reject him merely because he has failed to unriddle some obscure grammatical problems; or to answer an unexpected question, which only required a reference to some familiar and easily accessible authority.

## BOOKS AND READING.*

 by rev. prof. william clark, trinity college, toronto.WHETHER we can still say with the "Preacher" that "much study is a weariness to the flesh," we can at least use the other part of the sentence in which those words occur, and declare that "of making many books there is no end," and this with a fulness of meaning undreamt of by the author of Ecclesiastes. Books

[^0]seem to rush upon us in rivers, in floods, in oceans. The man who possesses the best library is constantly coming upon books, the titles of which he has never seen or even heard of, and we may doubt whether even the best informed bookseller reads all the lists and advertisements of new publications.

In such a case the pretensions of one who attempts to speak on "books
and reading" must be very modest, and it would be well that the expectations of his hearers should be the same. One can only hope that he may be able to offer some hints which may be helpful to those who are stili young and have the greater part of their experience yet to come. So, without further prelude, I will begin by saying some words on
I. The valuc of reading, on the im portance of the subject under consideration. Even if I should be unable to say anything new on this subject, I shall at least recall to your minds some words of the great writers of the past which you will be glad to hear once more.

1. And I will begin by pointing to some negative advintages in reading.
(1) For one thing, it may help to counteract the somewhat excessive practical tendencies of the age and of the land in which we live. There is no necessity for here insisting upon the necessity of practice, or upon the application of the utilitarian test to the employment of one's time. But mere utilitarianism has a tendency to defeat itself; and no people has ever been great which neglected theoretical, speculative, and ideal considerations. Now, it is difficult to see how these can be kept alive without literature. As a matter of fact they are seldom kept alive otherwise. It needs books, good books, and some variety of books to raise men's thoughts and sentiments above the often weary round of practical life.
(2) Another negative use of books is found in the fact that reading, and especia!ly ahundant reading, will help to stop a great deal of useless and superfluous talking. It is a terrible and mysterious subject even to refer to. Think of the amount of talking that goes on in this great city in one hour! Think of the quantity of vapid senseless chatter that pours from human lips, having hardly any rela-
tion, one might fancy, to human brains, from day to day, from week to week. Of course we know it is all wrong and stupid. We do not even need the strong language of Holy Writ to assure us of this: "A man full of words slall not prosper upon the earth;" "In the multitude of words there wanteth not sin;" " Hc that keepeth his mouth and his tongue keepeth his soul;" "The tongue is a fire;" "The tongue can no man tame." Almost everyone dislikes excessive talking, except perhaps his own. The silent man dislikes it. It bores him, it irritates him. The talkative man dislikes it, it stops his own talking. Everybody almost is of the same mind. There are people whom you are afraid to meet in the street, especially if you are in a hurry. When they get hold of you you are nailed to the spot for an indefinite period, and without a chance oí exercising your own gifts. It was an excellent definition which a friend of mine gave of a bore. "A bore," he said, "is a person who insists on talking to you about himself when you want to be talking to him about yourself." But I must not be led on further on this subject. Suffice it to say that, just in proportion as we encourage reading and practise it, we shall help to stay this pestilence of talk in ourselves and others. "I never," says Thomas a Kempis, "return from the ordinary concourse of men, but I feel myself less of a man." It is a strong saying; but it could seldom be said of the perusal of books, unless we have made a very bad choice. Certainly we seldom look back with regret upon hours spent in study or reading. I fear that we very often find general society unprofitable. Mr. Carlyle says that "speech is silvern, but silence is golden." But a great deal of the current coin of conversation is made of a much baser metal than silver.

It is much in favour of reading if it helps in any degree to stop the circulation of such a modium. But it is time to turn to some of the
2. Posititic advantages of reading. What is the use of it? Anyone can answer that question. It is the way to knowledge and to power of the best and most righteous kind ; it is a means of unceasing refreshment and delight; it is a solace when almost every cther pleasure and carthly blessing has departed. How admirably has this been said by one of the greatest contributors to human delight, the author of the "Advancement of Learning" and the "Essays" -the great Lord Bacon :
"Studies serve for delight, for ornament, and for ability. Their chief use for delight is in privateness and retiring; for ornament, is in discourse; and for ability, is in the judgment and disposition of business. . . . Crafty men contemn studies, simple men admire them, and wise men use them.

Reading maketh a full man, conference a ready man, and writing an exact man. And, therefore, if a man write little, he had need have a great memory; if he confer little, he had need have a present wit; and if he read little, he had need have much cunning to scem to know that he doth not.";
(i) It may be freely granted that there are men who have acquired great knowledge, especially of the prartical kind, and even a large amount of accurate information, without the aid of books. Yes, undoubtedly, the wise man, as Shakespeare reminds us,
Finds tongues in trees, books in the running brooks,
Sermons in stones and good in every'hing,
even as another man, who was not so very wise, tells us-

[^1]It may also be granted that many men who have been great readers have not been distinguished for wisdom or for any practical faculty whasever. But what does this prove? Only that some few men have the gift of picking up from the conversation of other men the knowledge which these have acquired mostly from books; whilst many of us are so foclish that we have no power of appropriating or assimilating the wisdom of others however it may be presented to us. And all this is nothing to the purpose.

Books, as a rule, and upon the whole, represent the best and the wisest of men. "A good book," said our great Milton, "is the precious life-blood of a master spirit, embalmed and treasured up on purpose to 8 life beyond life;" and Descartes remarks, "The reading of good books is like a conversation with the best men of past ages, and even like a studicd conversation in which they communicate to us only the best of their thoughts. To converse with those of other ages is very much the same thing as to travel. It is well to know something of the manners of different peoples, in order to form a sounder judgment of our own, and to prevent us from imagining that all which is contrary to our own customs is also contrary to reason; as is the way with those who have seen nothing else." *
(2) It is easy to make out exceptions to any principle or any rule; but in these matters we must be guided by the experience of the worthiest who have gone before us; and the testimony of such is unequivocal and unanimous. We might quote the words of men, ancient and modern, telling us of the cultivation of mind, of the discipline of the will, of the joy and communion which they have found in books-in days of health and prosperity, and in hours of sickness and adyersity.

[^2]"If I were to pray," says Sir John Herschel, "if I were to pray for a taste which should stand me in stead under ever; varicty of circumstances, and be a source of happiness and cheerfulness to me through life, and a shield against its ills, however things might $g 3$ amiss and the world frown upon me, it would be a taste for reading. I speak of it, of course, only as a worldly advantage, and not in the slightest degree as superseding or derogating from the higher office and surer and stronger panoply of religious principles, but as a taste, an instrument, and a mode of pleasurable gratification. Give a man this taste, and the means of gratifying it, and you can hardly fail of making a happy man, unless you put into his hands a most perverse selection of books."

And Sir George Trevelyan, in his "Life of Lord Macaulas;" tells us what that great writer thought of books:-"When I asked to what he owed his accomplishments and success, he said to me, When I served when a young man in India, when it was the turning point of my life, when it was a mere chance whether I should become a mere card-playing, hookahsmoking lounger, I was fortunately quartered for two years in the neighbourhood of an excellent librarv, which was made accessible to me." And again:-"Of the feelings which Macaulay entertained towards the great minds of bygone ages it is not for any one except himself to speak. He has told us how his debt to them was incalculable; how they guided him to truth; how they filled his mind with noble and graceful images; how they stood by him in all vicissi-ludes-comforters in sorrow, nurses in sickness, companions in solitude, the old friends who are never seen with new faces, who are the same in wealth and in poverty, in glory and in obscurity. Great as were the honours and possessions which Macaulay ac-
quired by his pen, all who knew him were well aware that the titles and rewards which he gained by his own works were as nothing in the balance as compared with the pleasuze he derived from the works of others."

Some of these thoughts have been other expressed in a varicty of ways by great writers; many of whom have dwelt upon the value and solace of books to those who have lost friends and the favour of the world ; and such losses may come to all.

It is no utterance of cynicism or misanthropy to say that a time may come to any of us-however wide our popularity may be at any given mo-ment-when we shall need other resources than the favour of our fellowmen. And what resource so satisfying as the communion of the best of all ages-a communion ever accessible to us in our precious books? It is a thought, as I have said, which has been expressed by many different writers in different ways.

Thus Tennyson represents the disappointed hero in Maud as exclaiming bitterly:

> "I will bury myself in my books, And the devil may pipe to his own."

And Southey, in tones of pensiveness and sadness, exclaims :
> " My days among the dead are passed, Around me I behold, Where'er the se casual cyes are cast, The mighty minds of old; My never-failing friends are they. With whom I converse day by day."

Very beautifully have such thoughts been expressed by the charming pen of Petrarch :
"I have friends whose society is extremely agreeable to me; they are of all ages and of every country. They have distinguished themselves both in the cabinet and in the field, and obtained high honours ior their knowledge of the sciences. It is easy to gain access to them, for they are always at my service and I admit them
to my company, and dismiss them from th whenever I please. They are never troublesome, but immediately answer every question I ask them. Some relate to me the events of past ages, while others reveal to me the secrets of Nature. Some teach me how to live, and others how to die. Some by their vivacity drive away my cares and exhilarate my spirits; while others give fortitude to my mind, and teach me the important lesson how to restrain my desires, and to depend wholly on myself. They open to me, in short, the various avenues of all the arts and sciences, and upon their information I may safely rely in all emergencies. In return for all their services, they only ask me to accommodate them with a convenient chamber in some corner of my humble habitation where they may repose in peace; for these friends are more delighted by the tranquillity of retirement than with the tumults of society." *
II. But it is time to pass on from the consideration of the advantages of reading-upon which, perhaps, we have spent too much time alreadyand to offer some hints as to the choice of books and the subjects of study.
Sir John Lubbock and Mr. Frederic Harrison have both written well on the "Choice of Books," and the former has given a list of what he considers the hundred best books; while others, again, have sought to correct and supplement the list. You will find valuable guidance in those lists. It would be useless for me to attempt any such work at the present moment, although I shall hope presently to mention some books which every one who can read at all should make himself acturainted with. But first it seems hest to indicate what should be the general lines of our reading. And in attempting this I am thinking

[^3]specially of those who are leavirg or have left school, since those who are still at school will do well simply to follow the guidance of their parents 7nd teachers; and those who are at college will find in their studies and in their ramifications a leading which will be nearly sufficient for theis purpose.
x. I would, then, first of all, recommend that, in leaving school, young men and women should, to some extent at least, carry on the studies in which they were then engaged.

For instance, you got some general acquaintance with the history of Eng. lish literature, its origin, progress, development; and you made, at least partially, the acquaintance of some of its principal representatives. There can, then, be no great difficulty in carrying on your reading on the same lines. Take first the authors that you like, and then the authors that you hear of men of the finest taste approving, and teach yourselves to like them too-which you can generally do if you try.

Ther, again, you probably learnt some language, or the elements of some language besides your own. Or, if not, you had better set to work withcut delay. The learning of one other language besides our mother tongue is really of incalculable value, even in making the structure of our own more clear to us. For this purpose perhaps Latin would be the best, but French will do; and although no language is quite easy to learn, and some are prodigiously difficult, yet French is one of the easiest. Many persons, however, find German more interesting; and, I think, for us who are mainly Teutonic, it is easier to speak German than French. It is a fine language and has a noble literature.
2. Another hint may be offered which is equally applicable to older
people, namely, that people should study books which are devoted to their own calling, profession, or pursuit in life.

Of course there is a danger here. "A man of one book" is not a pleasant kind of companion; and a man of one class of books is little better. A physician whose whole study is given to diseases and remedies will not be an educated man, and I doubt whether he will be a better medical adviser than one who can spare some time for general literature. A clergyman who reads nothing but theology may know the history of all the controversies, but he will probably not know nearly enough of the thing with which, after God, he has most con-cern--the mind of man.

Here we are between two dangers, the danger of dissipation and the danger of undue concentration; and both are distinct dangers. I remember knowing a very distinguished fellow of a college at Oxford, a wellread theologian, well up also in the history of philosophy and of science -a man so able and interesting that one sometimes wondered what it was that was wanting to him One day he told me that he never read fiction or poetry, and then I found out. But I am told there are some clergy-men-I hope none such will go forth from the theological school of this University - who never read even theology in any wide and deep sense of the word, but only old sermons, for certain practical purposes. If there are such, I am glad I am not a layman and one of their parishioners. Some one says that "a man should know everything of something, and something of everything." It is a great deal to require, but it contains a very important truth, although in an exaggerated form. A man should know his own business as well as he can learn it ; but he should know a little about a good many things be-
sides. These principles, then, may well guide our studies. A man may read a good deal without being a mere smatterer; but he certainly will be this, unless he also concentrates his reading on some special department of study, of thought or of work.
3. A piece of advice, often given, may be repeated with some limitations and qualifications, namely, that we should read what we like to read, that in the choice of subjects of study and of books we should follow our tastes and inclinations.

We have many able thinkers and writers who give us this counsel; and we have others who warn us of its limitations. Thus Sir J. Lubbock, in his lecture on books, remarks :
" In reading-it is most important to select subjects in which one is interested. I remenber years ago consulting Mr. Darwin as to the selection of a course of study. He asked me what interested me most, and advised me to choose that subject. This, indeed, applies to the work of life generally."
'To a similar effect, Dr. Johnson, as reported by Boswell, remarks: "I am always for getting a boy forward in his learning, for that is a sure good. I would let him at first read any English book which happens to engage his attention; because you have done a great deal when you have brought him to have entertainment from a book. He will get better books afterwards."

And again, "Snatches of reading will not make a Bentley or a Clarke. They are, however, in a certain degree, advantageous. I would put a child into a library (where no unfit books are) "-mark the limitation"a and let him read at his choice. A child should not be discouraged from reading anything that he takes a liking to, from a notion that it is above his reach." This is an excellent point, and has been insisted on by
several writers of eminence. We are too ready to think that books are above our understanding. But he goes on: "If that be the case, the child will soon find it out and desist;
if not, he of course gains the instruction, which is so much the more likely to come from the inclination with which he takes up the study." (To be continue 7 .)

## QUEEN'S UNIVERSITY AND WHAT IT HAS DCNE FOR CANADA IN THE PAST.

BY FIDELIS, KINGSTON.

AT the time when Queen's University was first founded, the educational appliances of the country were mosi rudimentary. In Eastern Canada the zeal and energy of the French Jesuits had early made some provision for higher education; but in the still sparsely settled Province of Ontario, it was difficult to find even a respectable Grammar School. Some few there were, chiefly maintained by private enterprise. King's College at Toronto had begun a somewhat languid existence, but its strictly Anglican basis restricted its usefulness almost exclusively to students of the Auglican Church. Even this institution could scarcely be said to be in active working order at the time when the founders of the Presbyterian Church in Canada first began to take vigorous measures towards the accomplishment of an object which for years had been before their minds-that of establishing an institution which should efficiently ${ }^{4}$ rain an intelligent native ministry.

It was in 1839 that the Synod of the "Church of Scotland in Canada," itself not yet ten years old, began to set to work in earnest to raise funds and make arrangements for a college to be equipped with professors in Arts as well as Theology. For, although their object was, in the first place, the training of students for the Presbyterian ministry-these far-seeing and large-hearted men saw the
importance of bejinning at the beginning, and of laying, even then, the foundation of a university which should grow with the growth of the country, attaining in time the goodly proportions that we recognize to-day. The first public meeting held in ths interest, in response to the recommendation of the Synod, took place in St. Andrew's Church, Kingston, in December, 1839, presided over by its minister, the late Rev. John Machar, D.D., who introduced the subject in an excellent address, still extant; and who was one of the committee appointed to select a site in Kingstonthe place which had been chosen for the location of the proposed university. A Reyal Charter was applied for, which passed the Great Seal about October, 184I, when the Colonial Committee of the Church of Scotland at once appointed an Edinburgh clergyman, the Rev. Thomas Liddell, D.D., as the first Principal of Queen's College-the name of the new university, which had been graciously approved by the young queen. A grant towards its support was also made by the Church of Scotland and continued for many years.

This appointment, somewhat prematurely made by the committee in Edinburgh-in happy ignorance of the drawbacks and difficulties that, in a new country, interfere with the sudden equipment of a college-was shortly followed by the arrival of the
new Principal, to find that the university, though possessed of "a name," had not yet a."local habita-tion,"-to say nothing of students and a professorial staff! It would be difficult to say wnich of the parties concerned were most dismayed--the Canadian trustees, whose arrangements were still so incomplete, or the new Principal, who had hurried out at great inconvenience, supposing that a university on the Scottish pattern was organized and awaiting its head. However, a building was secured--of very modest exterior indeed, as the presence of the Seat of Government in Kingston pressed heavily on its house accommodation-and in this the worthy Principal, in all his Scottish clerical dignity, established himself, in company with his one classical professor-the late Rev. P. C. Campbell, D.D., afterwards Principal of the Scottish University of Aberdeen-to wait for the expected students. The young men soon after arrived-a goodly number, as it seemed, for the start. There were seven or eight advanced students, anxious to prosecute their theological studies under the Principal, who was also professor of theology, and some ten or twelve eager to begin a course in arts. But owing to the deficient GrammarSchool education already noticed, only two of these aspirants for academic culture were equal even to the very moderate matriculation standard of those days; and the classical professor, a man of great ability and scholarship, had to act for a time as preparatory tutor, grounding his pupils in the elements of Latin and Greek. Some of these young men afterwards became efficient Grammar School teachers, and it is in no small degree due to the sons of Queen's that the preparatory education of the country so rapidly reached a very different standard.

A third professor was shortly added to the staff in the Rev. James William
son, LL.D., who undertook the teaching of mathematics and natural philosophy, for which he was admirably qualified, and which he so long contnued to discharge. As Vice-Principal of Queen's, the veteran professor still continues to give the University the benefits of his experience and accomplished scholarship, and is now the sole survivor of the original staff and founders of the University. The second session opened with a promising number of students, and a prosperous career seemed opening before the younr institution, when an unexpected event occurred, which for some time acted as a serious check on its development. This was the division in 1884 of the still weak church which had founded it into two bodies-a result of the celebrated "disruption" of the Church of Scotland. The division in Canada was solely caused by the division of sympathy between the two opposed parties in Scotland, as the original causes of separation there had no existence in Canada. Nevertheless, owing chiefly to delegations from Scotland, the division took place, the new University remaining under the control of the section representing the Established Church of Scotland. But its.sustaining constituency was of course very much weakened, and of its few theological students nearly all threw in their lot with the seceding branch of the church. Principal Liddell and Professor Campbell, both severely tried and discouraged by this unfortunate division, resigned their professorships and returned to Scotland.

To fill up the breach thus made, the Rev. John Machar, D.D., minister of St. Andrew's Church, Kingston, accepted the office of honorary Principal, which he held for ten years, also ably fulfilling the duties of professor of Hebrew. The classical chair was again filled by the appointment of the Rev. George Romanes, a man of
most vigorous ability and thorough scholarship. The memory of his admirable prelections was long cherished by the young men who studied under him, and his mental vigour has been inherited by his son, George J. Romanes, well known in the scientific world as an original investigator and able writer. The Rev. Dr. Urquhart, of Cornwall, and Dr. George, of Scarboro', divided between themselves the duties of the professorship of divinity.

The Synod which had thus spared no exertion to maintain, despite all difficulties, the infant University, had the satisfaction of seeing its numbers growing from year to year, and of knowing that-besides the training of ministers-each session's close sent out young men well qualified by respectable scholarship and intelligent training to raise, as teachers, the generally low level of education in the surrounding country.

In 1855 Dr. Machar finally resigned the office of Principal and Professor of Hebrew, which indeed added to the care of a large city congregation were too much for his strength. A series of changes also took place, tending to the better equipment of the University. Dr. George, a man of real genius, was appointed to the new chair of Moral Philosophy and Logic, and deeply impressed all who came under his teaching with the glowing eloquence of his lectures on the first of these subjects-then the only substitute for modern metaphysics. Professor Smith, who had, some years before, succeeded Professor Romanes on his removal to Scotland, now became professor of Hebrew, succeeded in the classical chair by Professor Weir, now occupant of that chair in Morrin College, Quebec. Some years later Professor Smith died, and was ably succeeded by the present Hebrew professor, Dr. Mowat, the first of the graduates of Queen's to hold a professorship, and one of
two original matriculants at the first organization of the University. The Medical Faculty of the University was formed about 1853 , owing much to the exertions of two of its first prefessors, Dr. John Stewart and Dr. Dickson. This faculty eventually became the Royal College of Physicians and Surgeons, distinct from the University, but affiliated with it, as is now also Trinity Medical College, Toronto. Before the second decade of its existence was completed, the graduates of the University were occupying posts of usefulness throughout Canada and far beyond her bounds, as teachers, ministers, doctors, lawyers and civil engineers.

In 1860 a permanent appointment was made to the vacant office of Principal, the choice of the trustees falling on the Rev. Wm. Leitch, D.D., a friend of the great Norman.Macleod, and a man of rare accomplishments, of some literary distinction, and of most amiable and genial nature. His appointment was hailed by all concerned with great satisfaction and enthusiasm as inaugurating, it was fondly hoped, a new era of progress and prosperity. About the same time a fresh impulse to scientific study was given by the foundation of a Natural History professorship, appropriately filled by Dr. George Lawson, now of Daihousie College, Halifax, a most accomplished naturalist, who shortly after founded the "Royal Botanical Society of Canada," which lived and flourished for some years, and did some good work in stimulating botanical study and research. A year or two later, the chair of Philosophy, vacated by the resignation of Dr. George, was re-filled by the appointment of Professor J. Clarke Murray, LL.D., a distinguished graduate of Glasgow, whose combined ability and geniality made him a favourite professor of Queen's during the years of a most acceptable professorate, as it
still makes him the favourite professor of McGill University. A Faculty of Law was constituted very soon after Dr. Leitch entered upon his duties, with several able lawyers as professors. Dr. Leitch also initiated an important addition to the curriculum-that of History and English Literature, in which J. M. Machar, Esq., M.A., was appointed lecturer, being the second graduate of Queen's to occupy the position of a teacher in the University. As there were no funds to endow the chair Mr. Machar, who had studied these subjects in ermany as well as Scotland, gave his services gratuitously, without even the remuneration of class fees. His lectures were very acceptable to the students; but as, after the death of Principal Leitch in 1864, there seemed to ba no prospect of providing a salary for the lecturer, the idea of a chair was relınquished till a later period, when a partial endowment was given by the father of Professor Ferguson, who was then appointed Professor of History and Literature-the first of which he still continues to teach, the second being made a distinct professorship.

Principal Leitch held office for only four years, being prematurely cut off by disease of the heart-aggravated, undoubtedly, by the anxiety and worry caused by some internal troubles and dissensions which then, for the first and last time in the history of Queen's, marred its harmony and checked its prosperity. His place was filled by the appointment of the Rev. Wm. Snodgrass, D.D., at that time minister of St. Paul's Church, Montreal, who for the next twelve years continued to preside over the institution with much fidelity and acceptance, and sent out from the theological hall many of Canada's present most useful ministers. About the same time Professor Weir was succeeded in the classical chair by the
late lamented Professor Mackerras, one of the early graduates of Queen's, and one of the most devoted and beloved professors who ever taught in her class rooms. He cummunicated to his students much of his own enthusiasm in classical study, which had made him at an early age a most successful Grammar School teacher. His valuable life may almost be said to have been laid as a sacrifice on the alter of his Alma Mater, when there arose, ere long, one of several crises in her history, when her very existence seemed trembling in the balance. About 1867 the grant from Government, which-moderate as it was, compared with the revenue of Toronto University-had been considered almost essential to her life, was withdrawn. A meeting of the friends of Queen's was convoked in St. Andrew's Church, Kingston-the scene of the first public meeting ever held in her interests-to consider the possibilities of going on in the altered circumstances. Much enthusiasm was displayed, especially on the part of her alumni, and a generous support was promised, while the very idea of extinction was rejected as out of the question. The Principal and Professor Mackerras cheerfully gave much of their vacations to the toil of raising funds by volunteer subscription, to supply the loss of the modest grant ; and the health of Professor Mackerras became at last seriously undermined by the strain.

In the meantime several changes had taken place in the professorial personnel. Professor Lawson, having retired from the chair of Chemistry and Natural History, had been followed by Dr. Robert Bell, now of the Geological Survey, who was in turn succeeded by Professor 1 N. F. Dupuis, who now fills the Mathematical Chair, and whose brilliant ability and unwearied devotion to the interests of his students have made
him one of the most highly esteemed and honoured of the present staff. About 1870 Professor Murray retired to accept a similar appointment at McGill University, and was succeeded, in the professorship of metaphysics, by the present occupant, Dr. John Watson, an accomplished student of philosophy, and widely known to lovers of that study by his able works on the Kantian school of thought. In 1877 occurred one of the most important events in the history of the University-the appointment of its present Principal, George Monro Grant, D.D.-Dr. Snodgrass having resigned his position in order to return to Scotland. The accession of Principal Grant, whose high qualifications are too well known to need comment here, was greeted with great enthusiasm by all connected with the University, and its subsequent history has fully justified that enthusiasm. In his inaugural address, Principal Grant took the ground that it vids well that the endowment of Toronto University had not been frittered awiy by subdivision, being little enough for one well equipped University, and that others would justify their existence only by securing for themselves the means of adequate equipment. He indicated that the friends of Queen's must put her on such a footing as to keep her abreast of the requirements of the age. The result of his energetic régime and eloquent appeals, is visible to-day in the large and able staff of Queen's, in her beautiful buildings, her hundreds of students, and the additions to her usefulness still in progress. The noble edifice which to day replaces her first humble habitation was a worthy gift to the institution from the citizens of Kingston. A large increase to her endowment was secured through the exertions of Principal Snodgrass and of Professor Mackerras in his last days of health ; but the indefatigable Prin-
cipal has taken "Excelsior" for his motto; and, having, mainly by his own personal exertions, and almost at the cost of his health and life, secured an endowment sufficient to place the University on a permanent footing, is likely to follow the example of the immortal Oliver Twist, and with greater sucer A new Science Hall-the genercus gift of a citizen of Kingston -will be immediately erected on the college campus. affording additional room, already much needed, for the teaching of pure science. It is to be hoped that, in the interests of a large tract of surrounding country of which this is a convenient centre, the Ontario Government will supplement this expansion in a scientific direction by the creation of a School of Technology or Applied Science, in convenient proximity, which could be done with great economy of resources, and would be of great practical importance. The chair of Physics is now separated from that of Mathematics, and was taken by Professor Dupuis, a first-rate mathematician, and the author of valuable English text books. Physics also is subdivided, Astronomy being retained by Professor Williamson, who has also charge of the public Observatory, removed to the college campus for convenience, observations being regularly taken in connection with the University. Physics proper is taught by an accomplished physicist, Professor Marshall, while Natural History is under the charge of Professor Fowler, one of the best botanists in Canada The scholarly Professor of Classics Professor Fletcher-has, as assistant, the Rev. A. Nicholson, a man of great linguistic accomplishments and wide knowledge. Political Economy has also been dissociated from Metaphysics, and is taught by Professor Shortt, a distinguished graduate of Queen's. Separate chairs of Modern Languages and English Literature have been re-
cently established and filled, the one by a Canadian, Professor McGillivray, the other by a Scotchman, Professor Cappen. In Theology the study of Apologetics and New Testament Criticism was some years ago made a distinct professorship, filled by the Rev. Donald Rosi, B.D., while one or two other lectureships have been created in the same Faculty. The Faculty of Law numbers six lecturers, but owing to scarcity of students has not much scope for its activity. The total number of professors in all the Faculties is at present as follows:In Theology four; in Arts twelve, with six additional lecturers; in the affiliated Royal College of Physicians and Surgeons twelve; in the Woman's Medical College twelve; and in the Faculty of Law six lecturers, making in all a teaching staff of about forty members, as some of the same professors are of course repeated in different Faculties. Queen's, with its original one Principal and professor, and as poor and bare as was Glasgow University at its birth, has within less than fifty years marvellously grown. The work it has done for the country may be partly measured by the fact that already it now numbers in its teaching staff about thirty native Canadians, the Principal included, a large proportion of whom are alumni and graduates of its own. This, it may well be hoped and expected, will more and more be the case in all our Universities, worthily manned by worthy suns of Canada.

The present number of students are as follows:-In Arts, 232 ; in Theology, 20 ; in the Royal College of Physicians and Surgeons, $15^{2}$; in the Woman's Medical College, 32. Deducting about 12 for cajes of double registration, this makes a total of about 420 studcnts. Of the 232 Arts students 35 are young women, and the University now numbers a fair proportion of lady graduates. Queen's
was indeed one of the first, if not the very first, University in Canada, to open its doors to both sexes without distinction, on the ground that a liberal education should be open to all who desire it. Nor has the practice of "co-education" in Arts apparently involved any evil results of any kind, while the lady students have uniformly taken good places in their classes. The Royal Medical College also, with commendable generosity, opened its doors to female applicants; but certain inconveniences connected with co-education in this department led to the establishment of the Woman's Medical College, by public spirited citizens of Kingston, simultaneously with the one in Toronto. Two of its ablest graduates are already numbered in its professorial staff, affording obvious advantages.

This large body of students is kept without difficulty in the most creditable order. As a whole, they are earnest, steady, and hardworking. Within the last few years a strong missionary feeling has grown up among them, and no fewer than eight have, during the last year, gone to various parts of the mission field, one of these being maintained by the students and alumni of the University. A large and fourisning Alma Mater Society, founded about 1860 by J. M. Machar, Esq., is now a strong and flourishing body, numbering many hundred alumni bound together and to their Alma Mater by a strong esprit de corps, which has again and again rallied them to her aid in time of need. A number of literary societies of various kinds afford an outlet for social element and for intellectual activities other than mere class work. The admirable spirit tia ${ }^{+}$ne:vades the whole University was well illustrated during the late prolonged absence of the Principal to recruit his impaired health, during which time
the University work went on with its usual regularity and good order ; and also by the hearty rejoicing with which his return was recently greeted by all connected with the institution. A torchlight procession and a large and enthusiastic reception in Convocation Hall celebrated his arrival in fully restored health and strength, and in his speech on that occasion he declared very plainly that the motto of the University under his guidance is still to be, "Onward and upward."

It is clear, indeed, that Queen's University is now in no danger from any lack of progressive spirit, yet, in common with our other educational institutions, it is exposed to other and peculiar perils. In its early days it suffered from the generally low level of education in the country, while its course was too simple and elementary to be complete. Now, with the great multiplication of subjects and professors, honour courses and special prizes, along with a more ambitious standard of University education, the danger lies in quite the opposite direction. High pressure and indue specialization of the undergraduate course are now the perils that beset our Universities, and against them the best minds of our time have begun to protest. Fcr the ideal of a "liberal education" is to lay a broad foundation of general knowledge on which the more special superstructure is afterwards to be built. The student, at the close of his undergraduate course, should have gained some adequate idea of the relations and proportions of different kinds of know-ledge-some intelligent grasp of the great outlines of the different provinces of the kingdom of thought. Any attempt to secure special scholarship in any department during the undergraduate years, necessarily narrows the scope of the education, often to an almost injurious degree. As a matter of fact, "honour" graduates often
leave our Universities densely ignorant of almost everything save their special "honour" courses. And if we find such an one suffering from haziness as to the simplest elements of English literature or English history, it were scarcely a balm to our wounded sense of fitress to know that he could perhaps calculate an eclipse with the accuracy of a Leverrier. Not, conversely, will an intimate acquaiatance with Anglo-Saxon or Greek roots, or Pythagorean Philosophy, atone for ignorance of the spirit of ancient literature, or of the simplest facts of Natural history. But this evil is inevitable so long as each professor thinks only of his own subject, with the modern ambition of making his course as "stiff" and his examination as severe as possible. Undue specialization of undergraduate study acts injuriously both on the man who is to be a specialist in that direction and on the one who is not. In the first case, the student misses an opportunity that may never recur, of having his mental vision enlarged and his whole being developed. In the second, he is sure to find that he has wasted much valuable time in the acquirement of knowledge which he is likely never to need and soon to forget. To combine the largest possible degree of general culture with the invaluable requisites of accuracy and thoroughness, in the undergraduate years, is a matter requiring careful study, comprehensive grasp and thoughtful arrangement.

There is a second great evil connected with excessive special study. As each professor wishes to bring his own subject up to as high a standard as possible, the consequence is that each is apt to give as much work as -to do it justice-would occupy the whole time of air average student. If, as usually happens, the student is taking two or three courses at once, the only alternatives are killing or
cramming. In the first event the knowledge gained will not be of much use to any one; but in the second it will be of little more. Under overpressure the main anxiety is "to get through." Instead of developing the noble love of knowledge for its own sake, such a subject impels the student to make the "exam" an cud in itself, to study for that alone, to touch only the work needful, and to talk of "knocking-off" so many subjects as if they were miles on a race course. Of course such knowledge is forgotten almost as soon as gained, and is a miserable substitute for " liberal eduaation" in its true sense. No words could be stronger, however, than those in which some of the greatest literary
authorities of the day have recently protested against this very evil, and we may well hope they will find echocs in Canada. So far as Queen's University is concerned, the sound judg. ment and known aversion of its Principal to cramming and all its works, may be trusted towards checking this evil. But to do it thoroughly will require co-operation, not only between professors, but between Universities also. Why should there not be a conference of our best educators to take into serious consideration the best way of securing the truest kind of " liberal education" which shall verify the old time-honoured ideal,
" Didicisse fideliter artes cmollit mores."

# THE ESKIMOS: THEIK HABITS AND CUSTOMS.* 

BY W. A. ASHE, F.R.S.

ISpecially revised for Canada Edecational Monthly.
(Continucd from February No.)

IHAVE hinted to you that the Eskimo has brought the apparatus which he has devised himself for his own purposes, to a high degree of perfection. I have also drawn your attention to the fact, that in certain of the articles he has acquired from the outer world-the file, the saw, etc. -he has not been treated with that equity which is the deserving of his talents, or that which we are supposed to exercise between man and man; and I would add to the list, his gun. I do not think that I can describe the condition of this offensive weapon better than by the assurance, that I always felt there was a good deal more danger to myself and the Eskimo, than to the game he might be intent on the slaughter of. They are not a gun that has been specially manufactured for this market; you
could not manufacture such an article; nature and time, with the giadual though thorough changes that they bring about, have brought the implement, which had a youth some six centuries ago, into the disrepute I mention.

This gun, I should say, was more effective in both its expected and unexpected directions, than the old-time bow and arrow: There are very few accidents with them, even though their bursting-charge might be expected to be so very slight. This most satisfactory condition of the Eskimo is entirely owing to his extreme carefulness, not of himself, but of his powder. In the first place he will not use a gun of a greater calibre than 22 , more often 23. Into this he places a charge of powder, not greater than would be contained by a moderate sized thimble, then a wad of dried
moss, then the ball, which he invariably recovers from the carcass of his game, if he has hit it, or from the snow, where he will search all day till he find it, if he has missed his aim. As they have generally no means of re-moulding their bullets, this repeated firing of the same ball produces a bullet of a variety of shapes, which would be very uncertain in its results at any reasonable distance; but then the Eskimo, on account of the smallness of the charge of powder, is obliged to approach his game within distances that would appear ridiculous to one who has not seen the operation of approach. You must not forget that the Eskimo hunts under far greater difficulties than his congener, the .ndian. The Indian has a country in which want of cover in his hunting operations is the exception; the Eskimo hunts where there is absolutely a want of cover. When he approaches the seal, he does so over the surface of the ice ; he is the only prominent object on that spotless surface; when his approach is over the land, what might be inequalities in summertime, have been drifted full of snow in the winter season; and at all times there is a complete absence of such cover as is afforded the Indian by trees and shrubs. His methods of approach are very similar to those of the Indian, the principal difference being that they have to be executed with far greater care. In the case of the seal, who very rarely comes to the surface of the shore-ice anywhere near the shores themselves, because of the dangers that may be hidden behind the heaped up masses which border it, in the shape of a waiting Eskimo, he is therefore generally seen about a quarter of a mile off the land. The intervening space is as unobstructed as a billiard table. The seal, with his tail to windward, is able thus to watch the direction from which
"scent" will travel only short distances, whilst from the opposite direction he would receive timely notice of an Eskimo's approach by the "scent" which will be carried down by the wind. The Eskimo enters on the field of ice at a point which is intermediate between these two directions, and laying down on the surface, propells himself towards the seal by means of vigorous kicks when he sees that the seal is not watching, or has not at first noticed his appearance. At a very short distance it is quite impossible to distinguish between the Eskimo and the seal-their appearance and actions are so similar-an effect that is produced in the first case by the Eskimo having habited himself with an outer coat which has all the seal's peculiarity of marking. Up to a certain point the seal has only taken occasional notice of this object ; shortly he is conscious that it has got nearer; presently this is a matter that admits of no question; so the Eskimo occupies something like a quarter of an hour convincing the seal by a capital imitation of his every action whilst sunning himself, as he is doing at present, that he is not the enemy in disguise he really is. Having been successful in this, careful watching for the moments when the seal is not directly regarding him permit of a further approach. The required distance is eventually overcome. The Eskimo and the seal being now not separated by more than fifty yards, the shot is fired which is capable of proving fatal at this distance. It sometimes happens, as might be expected, that the Eskime misses his shot. One cannot help being struck with the wonderful similarity between his manner and the excuses be will offer on this occasion to his friends for the failure, and the same reasons and excuses that account for the biggest fish in civilization being lost in the landing.

In reindeer hunting, although clad in a garment that is composed of this skin, there is no hope of convincing a reindeer that this ball-like looking animal is one of his kind. The Eskimo then proceeds to "drive" his game in this case; one of them is hidden at the most convenient pass to the valley in which they may be feeding, whilst the others surround them at such a distance that although their presence is noted they do not take sudden fright, but feeding with the consciousness that there are certain suspicious looking objects in these directions, they gradually move in the direction of the ambuscade that is prepared for them.

There is a large difference between the seal's timidity when on the ice in winter time, as just explained by this hunting description, and the same animal in summertime. In the first case, he is out of his element on the ice, and knows that an enemy has him there at a disadvantage; but in summer-time, in the water, he has no ordinary fcar, feeling that he is the equal or superior of anything afloat, besides being possessed of a more than ordinary share of curiosity. On these grounds the Eskimo can approach him in his kyack, within spearing distance, which, I should say, would be represented by a distance of thitty yards in the extreme. Should the seal show any anxiety about the Eskimo's approach, he is calrned by the waving of a hat or any artic!e which may keep his curiosity awake till he is within the required distance. The spear-head once inserted into his flesh, he is "played" by the Eskime till his struggles cease. I might remark, in passing, that the "playing" of a salmon, from the insecurity of a kyack, would be a feat of no ordinary magnitude for a white man, and that the "plazving" of a seal or walrus from the same position is, as can be imagined, one requiring
the most delicate sense of balancing. It is said that an Eskimo will turn over in his kyack and come up smiling on the other side, having made a complete revolution without separating from his boat. I am quite willing to admit that anyone would make the most strenuous exertions in this direc. tion, whilst struggling head-downwards in water which is so nearly at its freezing point, but I do not see that this would be sufficient to perform the feat.

Having told you how the Eskimo kills his game, let me now explain how he eats it-first digressing somewhat. The Eskimos are supposed to deriv, heir name from aither of two Indian words, "Eskimatsic" and "Askimeg"-"they who eat raw flesh." Now, I do not intend to say that the Eskimo would deny this accusation, if it were made, but it has always been a puzzle to me why we should have made use of a word for the name of this nation whic', had an origin with certain Indians who inhabited the State of Maine. I do not say that this is not the origin of the term, but I must admit that I should have received more satisfaction from a word which had its origin a little nearer home. The Eskimo call themselves "Innuit," "the people"; a designation which perhaps covers a little more ground than they would be inclined to claim if they knew the full facts of the case. The sailor who constantly visits these waters, sealing and whaling, calls them "Huskies," and it is not unlikely that this word may give us a clue to the derivation of Eskimo, or, as the sailor would call it if he wished to Frenchify it, "Huskimo." There is a strong resemblance between this word "Huskie" of the sailor, and "Hus-sick-ke," the Eskimo word for a male Eskimo, and it does not seem unlikely to me that we may find a derivation for the name in this way a
good deal nearer the Eskimo's home than the State of Maine.
The Eskimo generally eats raw flesh; nature has instructed him to know that the more fat he eats the more readily can he keep warm, so he prefers the fat or blubber of the seal. Having a knife he cuts a strip of the flesh and blubber off; one end of this he puts into his mouth, holding the strip distended with one hand, the other with the knife severing the mouthfuls as required close off to his mouth. It is astonishing how fast an Eskimo will absorb a given quantity of food, which he does generally without any mastication; and, like the Indian, he will eat till he cannot stand, when, lying down, his wife will complete the operation by dropping "tit bits," as he lays, ino his mouth. They sometimes cook the blood, heart and other portions of the seal and reindeer over their fires or lamps; it is an operation requiring a good deal of time. They christen this concoction "Ko-fee," from a fancied resemblance in its taste and colour to coffee, which they have seen and probably occasionally tasted. They did their utmost to get me to taste this compound, assuring me it was on record that a shipwrecked mariner had wintered with them once and had survived this particular form of diet, which he had seemed to prefer to the raw one. Whilst perfectly willing to believe al! they had to say on this subject, I positively refused to try it, pleading having but recently breakfasted. After this I always made my visits to this igloo immediately after meal time.

The Eskimos tell one that they never quarrel amongst themselves. I have never seen an approach to a quarrel, which I largely attribute to want of opportunity. Their traditions speak of their encounters with the Indians, in that struggle, or series of struggles which has resulted in their
occupying their present isolated position; this may have been merely a struggle for existence, without passion. On the other hand, I have seen a mother lose her temper with her offspring, and thump it-yes, thump it-in just such a civilized and hearty way as is a familiar sight where passions are an admitted, though perhaps unnecessary part of the disposition. Of baby-hood, I saw a great deal; mothers, in that rush which I have spoken of, to save their very house from the dogs, would thrust their babies into my hands, gather up their skirts, so to speak, and leave me the sole charge of their treasures. In these intervals, with man's awful dread of a crying anything, worst of all a baby, opportunity was afforded for mutual investigation, and huge concessions on my part. It often had my watch, which never satisfied it till it had opened and had made several attempts at rearranging the works with a greasy finger. It should have had the lamp if it had shewn any attempt at crying for it, rather than that the mother should return and find it in tears, apparently the effect of my having pinched it. As elsewhere, nothing seemed too large for them to attempt to get into their mouths, nothing that they got in that they did not swallow, if not prevented. Girlhood, in which they aped being grown up, and kept house for an imaginary household. Boyhood, that performed the most extraordinary feats of stalking imaginary game, or that went on long voyages in an imaginary kyack, and performed unheard of feats on unheard animals. Manhood, with the realities of life and the struggle for existence. Womanhood, with its household duties, and the part of a beast of burden as with other uncivilized nations; yes, and the moments of entire enjoyment, when, like the rest of her sex elsewhere, she took such an interest in
the discussion of matters that would be classed as "gossippy."

The youth of civilization, when secking a partner for life, sets up an ideal character in his mind, with certain characteristics which are essential, and then, quite often, marries someone without any of them. The Eskimo, although not perhaps such an idealogue, insists upon his materialized ideal possessing certain traits : she should be fat, for choice; she is certain to be hard-working; she must have good tecth. Tecth, anywhere, are a convenience; amongst Eskimo women they are an essential. It would be like depriving the seamstress of her work-box, for an Eskimo wuman to have the toothache. She would be as a drug upon the matrimonial market did she show any incipient signs of weakness in this department, for every article of wearing apparel which is made out of the seal or walrus-hide has to be patiently chewed in the mouth to bring it to the condition required to receive the stitches, as a piece of such a hide, is about as unmanageable, beiore undergoing this process, as a piece of sheet-iron would be-nut if either were to be operated upon by a cold-chisel-but as far as the effects on it of a needle are concerned, and I can assure my audience that they can have but a faint idea of the amount of chewing which is required to keep even the smallest Eskimo family in boots, to say nothing of the remaining articles of attire. Even when the boot is made, it gets hardened with use, so that in wearing they are constantly subjected to this re-juvenating process. If you are paying them a visit, and they wish to show you the highest form of civility, the father will say, "Ung-ar-low (one of the children), remove this gentleman's boots, and give them to your mother to chew"; and there, whilst you are about your business, will this patient being sit, taking a dis-
jointed part in your conversation, at such moments as her occupation will permit.

I have described their kyacks, or water vehicles; let me describe their "kom-mit-ticks," or winter sleighs. Fashioned as our sleighs are with " runners," of about ten to twcive feet long, secured by cross-pieces securcly lashed to them, made out of driftwood, or the wreck of some unfortunate vessel ; they are shed with bone, just in the same way that our sleighs are with iron. This bone shocing, when they are travelling, is covered with a film of ice by squirting water over it, and smoothing the surface rapidly with the hands whilst it is in the act of freezing, so as to ensure an even surface. You would be astonished at the length of time that this ice covering will last; once in a day's march being generally sufficient to renew it, which they do from water that they carry with them in a bag made of seal-skin, which has been wrapped away amongst a heap of furs to keep it from freezing. Into this sleigh are harnessed from ten to possibly fourteen dogs, each attached to a separate line of white-porpoise hide; the leader on the longest line, and the rest in pairs, one on either side of the leader's line, and the pairs one behind the other on lines of the necessary length. 'This is the theoretical arrangement, and to some extent the arrangement on starting, but, once started, the dogs arrange themselves in a fan-shaped way, and cross from one side to the other either to change the direction of the hauling strain, or out of sheer perversity. The whole is controlled by the Eskimo's vcice, and a perhaps more effective whip, which has a handle of eighteen inches in length, and a lash of eighteen or twenty feet. An Eskimo wields this weapon with unerring precision and effect; a white man with even greater effect, but with much less precision,
because his endeavours seem to be put forth in directions which are as unexpected to his audience as they sertainly are to himself, and like the lightning, rarely, if ever, strike twice in the same place. As the dogs proceed on the way, every thing they pass which might have the appearance of being eatable is investigated by a rush of inspection from one of them, who swings out from the pack on his line, reaches it if it is within the limits of its length, investigates, and returns if it should prove a disappointment, without having stopped the march. If it should prove something eatable, the rest of the pack are upon him in an instant, and a struggle ensues, which-yes-beggars description. You can imagine the effect of some twelve dogs probably fighting for the only morsel that they are likely to have eaten for the past two or three days: then add to this the several twelve strings, the howling Eskimo, and the twenty-foot whip, and I believe you will have a very fair idea of the picture I would present.

When the dogs are following along a mith which they have already been over, no guide is necessary; but when the road is an unknown one, each of the party, including the women, take turns in running aliead of the dogs to show the way. The dogs follow the easiest way for themselves after their human leader, whilst one of the Eskimos who remains on the front of the kommittick guides it by thrusting the kommittick to one side with his font, so as to avoid any lump of ice or protruding rock that would knock the ice-film off the runners. You will understand, from the way that the doys are attached to the kommittick, that on going down hill the realization of the nope you have that you will get safely to the bottom will depend on several conditions which are not all in your or the Eskimo's control. First, the dogs must be a..e
to reach the bottom before the kommittick does; should it overtake them they will be scattered in every direction, then dragged by their lines in every conceivable position, till the sleigh is either overturned or brought to rest-generally the former. Then it is a much more difficult thing to steer a twelve foot sleigh such as this than it would be to guide the movements of one of less length, particularly when rushing at the speeds that they attain; it therefore quite often happens that the dogs rush down the hill in the required direction, whilst the kommittick rushes in a slightly different one, so .making their attempts to escape only temporarily successful, for shortly the divergence is so great that first a strain is put upon their lines by the increasing distance between them, then the kommittick passes them, turning them so that they face up the hill for an instant; then they are upset and dragged ; then the kommittick is upset, and its contents, human and otherwise, find a resting place some little distance further on than the bottom of the hill. The Eskimo do not seem to mind these exper:ences, principally because of the saisty afforded them by their innumerable articles of fur clothing. I used to pretend not to mind it, principally because the Eskimo, having a high sense of humour, I was afraid of increasing their desire to witness the operation of my flight in more than the unavoidable occasions.

The Eskimo uses his gun as little as possible, because of the extravagant cost of its charge. Wherever possible he uses his spear. In winter time, when the deeper bays are frozen over, he has an opportunity of doing so, for then the seal, feeding within its waters, has to keep certain holes open in the surface of the ice to serve the purpose of breathing, and alongside these the patient Eskimo will
watch all day, without a move, awaiting the seal's necessity and his own opportunity: It the seals have not made holes for this purpose, the Eskimo will make them for him. and trust to their being convenient to the seal's purpose and his own. He gencrally finds that the seals have one or two in use in each of these large bays spoken of, but it shortly happens that the seals, missing their companions through this means of exit from the watery world, become too timid to use so apparent a trap, and seek either the outside waters, or some other bay. The Eskimo then goes in search of a position where the seals are likely to have to pass quite frequently, and where, being passengers, the abstraction of one of their number will not raise alarm amongst the others who will be coming later. He therefore chooses some strait between an island and the mainland, of considera ble length, so that the passing seal will find the hole he has cut in the surface of the ice sufficient of a convenience to permit of his running the risk in any attempt at appearing out of his element. This hole is cut by the Eskimo by means of a spike which he has on the end of his spear. Having made it, he throws a slight covering of snow over the surface of the water within to prevent the seal catching a glimpse of him before he has come within spearing distance. Then crouching about arm's-length away from the hole he waits, without a move, which may be made at the very instant when a seal is approaching and so give a warning which would lose him his game, till he hears the scratching of the seal's flippers as he works his way up through the ice to breathe or sun himself; then the swiftly descending and unerring blow. I have never seen this blow actually given. I have kept company with him in his watching till intense excitement gave place to freezing in-
difference and I had to leave. I have watched him from the shore where this indifference was counteracted by occasional excursions for varmth, but have always returned to find apparently the same undiminished patient expectancy.

The seal, in winter-time, lives in the snows on the shores, just above t.igh-water mark. Into his house, or hollowed-out cavity, he comes, at or about the time of high-water, the tide having by its increase raised the ice so that the seal's passage beneath is possible ; he can therefore enter or go out during the few hours that cover the period of high-water-between these conditions of the vater he must either stay within or without. An Eskimo, with a dog suitably trained, will follow along the shore, at suitable times, till he comes to the locality of one of these houses, the position of which is indicated by the dog's instinct ; then the Eskimo spears, know. ing that the seal cannot escape, till he has been successful in his aim.

I have shown how economical the Eskimo is in the use of his powder and ball; so is he with his gun caps. It is true that a gun-cap can be used but once as a whole, but then the Eskimo uses it in part several times by dividing the fulminating powder within it into three or four pieces, one of which at a time he uses by placing it within the head of an already used cap. So with his matches, he divides most of them in two, lengthwise, by very carefully cutting through the composition at the end with his knife, an operation that would puzzle the ordinary individual.

Of their ceremonies and religious beliefs they are very reticent about speaking to any one, having probably in recollection the want of sympathy shown by the rough sailor for the subject, and, not caring to risk a repetition, we could get very little information out of them. They believe
in a future existence, with plenty as the reward; and bury with the deceased his knife, and, once upon a time, his gun. Today, they no longer supply him with his gun, as the experience has been that it is not reserved for his future use, as the modern skeptic amongst the Eskimo, probably reasoning that if game is as plentiful as represented, there would be no use for the article, and takes it to himself. They bury nothing with their womenkind, arguing that some happy hunter will look after their welfare in the happy huntingground. They have the very highest respect for the white man's medicines, but depend entirely on incantations for their own treatment in emergencies. When one of my party was laid up with scurvy, being anxious to see their treatment, we called in one of the leaders in the art, who, after assuring us that the subject was under the influence of the wicked spells of an opposition doctor, said, that with proper precautions he would be brought around; this was very interesting information to me as I was the patiunt.
I will not give you a further description of the modus operandi of this enchantress (the learned professions, or profession, being filled by those of the less stern sex) than by saying that they consisted of a series of grotesque movements and incantations, in which a somewhat numerous chorus took part to the solo of the doctress. At different stages in the proceedings we were asked if we felt better. In answer to which the only assurance that could with truth be given was that we felt no worse. Then the suggestion was made that we should double the chorus and the doctors, a proceeding that we did not agree to, as, having seen all of the operations which were necessary for our information, we did not see the object of it. The ennity of this op-
position doctress was earned in the most simple way; her name had been Ick-tu-ad-de-lo, "The Prophetess," and we thought we were showing our appreciation of the changes to which the language may be put by altering it to Ictu-we-awee ah, "The wooden-man"-an attempt at a pun-which seemed to be fully appreciated by, her fellows and lost on herself. They protect themselves from infectious disease and other ills by sewing one or more strips of seal skin about their outer garment, somewhat in the form of a maze, so that the spirit of the ill, approaching by way of this outer garment and following along these strips, may get lost before he can enter the body. Then they eat certain portions of the body of the seal, walrus and reindeer, as cures for certain lesser ills, and bind the body into all sorts of positions with thongs of raw hide for pains and aches.

The Eskimos have a large amount of admiration to bestow on the white man and his ways; they are the most satisfactory audience I ever had to exhibit conjuring tricks before, showing the most hearty appreciation for one's feeblest endeavours. But of all things which pleased them, were the mysteries, to them, of writing and telegraphy. Write a message to one of your men, at a distance from your house, give it to an Eskimo, explaining to him what the import of the message is and that it will be understood from those few insignificant looking lines, and he is lost in astonishment and admiration for the art. Tell him that you will, by a series of rappings, in accordance with the system of telegraphy, give any message he may dictate to you to your man at the other end of the room, which he feels is being delivered in his own tongue as he has given it, and you have him in a condition capable of believing the impossible possible. I do not think that there was anything
which gave them more constant pleas－ ure than the flying of a kite which I made for them．Had I so wished it， I might have considered the privilege of being allowed to fly this kite by them sufficient reward for any service， and met with no complaint from them． They never seemed to tire of watching its graceful movements，and when， sometimes，we used to put it a little out of adjustment，so that in its flight it would occasionally perform those sudden darts and swoops which are so familiar to us all，there seemed no end to their appreciation．Then， their admiration of the feat of sending up a＂messenger＂of paper along the string was very full；but nothing equalled the satisfaction they received from being allowed to fly it them－ selves．Of the toys which we made for the children，including most of the wooden articles which are to be seen in the shop windows at this season， nothing seemed to give so much plea－ sure as a swing that we made for
them．Mothers，fathers，sons，daugh－ ters and infants kept the thing inces－ santly in motion during the hours that we were obliged to set apart for the purpose，as it was suspended from the beams of our kitchen ceiling，and there were times when its use would have been inconvenient．All were pleased with it，and mothers made use of it to quiet their infants when other efforts seemed unavailing to reduce them to that condition which they are pleased to believe，and invariably describe to their intimates，as their normal one． Who ever knew an infant which was not to a mother，＂just the best natured baby in the world？＂

Then we left them，glad at the opportunity of returning to our friends and more familiar occupations，but with a mutual regret at the severing of an association which had made an otherwise dreary residence one of some interest；leaving behind us，let me hope，a no less pleasant memory than we brought away．

## JESUS，LOVER OF MY SOUL．

BY W．H．C．KERR，M．A．，TORONTO．

I $\eta \sigma o u ̄ s, \psi v \chi \hat{\eta}_{s} \mu o v \phi i ́ \lambda o s$, єiş $\sigma \grave{\nu}$ кól $\pi о \nu$ фєvкт́́धे，


$K \in \hat{v} \hat{\theta}, \dot{u} \sigma \omega \tau \bar{\epsilon} \rho, \kappa \in \hat{v} \theta \epsilon \mu \epsilon$ ，



$\Pi_{0 \imath} \gamma \epsilon \pi \lambda \lambda \grave{\eta} \nu \pi \rho o ́ s ~ \sigma \epsilon \mu o ́ v o \nu$

Ó̀ $\mu^{\prime} \dot{\alpha} \phi \eta^{\prime} \sigma \epsilon \epsilon \mathrm{s}$ óp $\phi$ avóv， $\dot{\alpha} \lambda \lambda^{\prime} \dot{\alpha} \nu \theta \epsilon \in \xi \epsilon \mu \nu o v \dot{\alpha} \epsilon!$ ．


 $\tau \omega ิ \nu \pi \tau \epsilon \rho \omega ิ \nu \dot{\jmath} \pi \bar{\partial} \sigma \kappa \iota a ̆$.
 $\sigma \grave{v} \cdot \grave{\alpha} \pi \alpha ́ \nu \tau^{\prime} \epsilon{ }^{\epsilon} \nu \pi \alpha \hat{\alpha} \sigma \nu \tau \hat{i}$ ．
Bō $\theta \hat{\eta} \sigma o \nu ~ \mu o c ~ \tau v \phi \lambda \hat{\omega}$ ка⿱亠乂 $\pi \dot{\epsilon} \sigma \sigma \nu \tau \iota, \kappa \dot{\alpha} \sigma \theta \epsilon \nu \epsilon \hat{\imath}$.
 тойvo $v \mu^{\prime}$＇＇a ${ }^{2} \lambda^{\prime}$ ádıкías
 $\chi$ 人́pıтоs кảd $\eta \theta$ єías．


KaOapi＇̧́ тàs $\dot{\epsilon} \mu о \bar{v}$ ѐтıvoías кардías．
$\mathrm{Z} \omega \hat{\eta} \mathrm{s} \pi \eta \gamma \grave{\eta} \nu \sigma \dot{v} \delta \eta \lambda o i ̂{ }^{-}$ סós $\mu o t \pi l \epsilon \in ̂ \nu ~ \delta \omega \rho \in a ́ v$ ．
 єìs گんฑ̀̀ aióviav．

## A JOURNEY.

BY A TORONTO MERCHANT.

$0^{0}$N the 2 rst of November last a small party left Toronto by an excursion car on the Grand Trunk Railway bound fr California; some for the northern part of the State, and some for the south; some were seeking health, others pleasure, or change of home. The writer had taken his ticket to Santa Barbara, a sea coast town in the southern part of the State. Thinking that a short description of the journey, and of the country and people of Southern California might be interesting to the readers of the Canada Educational Monthly, these lines are written. Our train left Toronto about mid-day, and on the following morning the great city of Chicago was reached, and the excursionists had about three hours to walk about its streets and notice the activity and energy of its people, who, within an ordinary lifetime, have built up a city of such vast commercial importance.

On the morning of the second day we arrived at Council Bluffs, having passed through the rich agricultural States of Illinois and Iowa. This city is in the western part of Iowa, and within two or three miles of the Missouri River, which form; here the boundary between the States of Iowa and Nebraska. Near to the city, and about half a mile west of the Missouri River bridge, the Union Pacific Railway commences, and the terminus is known as the Transfer Grounds. Here all passengers, baggage, mails, etc., from the east are transferred to this railway. On account of a delay of several hours we were ensbled to cross the river and make a visit to the city of Omaha, which is almost directly opposite and is in the State of Nebraska. It has the appearance
of a prosperous city, and is nicely situated on a slope about forty feet above the level of the river, and at an elevation of about 1,000 feet above the level of the sea. The first house was built here only a little over forty years ago, and the city is now the centre of at least half a dozen lines of railway, and has many fine buildings, and, from its position, not only as a railway centre, but being in the midst of an extensive and superior agricultural country, must become a city of considerable importance.

It was towards evening when our train started westward through the State of Nebraska, noted for its extensive grazing lands, great cattle ranches, and wild cow-bcys. On the following evening we reached Cheyenne, the capital of Wyoming, and the largest town between Omaha and Ogden, just half way between these two cities-the distance between them being $\mathrm{r}, \mathrm{0} 32$ miles. At this point we have reached an altitude of about 6,000 feet above the ocean level. The surrounding country is used principally for grazing purposes. A short distar ce from Cheyenne we passed tinrough Praitie Dog City, where these miniature dogs have their homes in great number, and from the cars we saw a great many of them. Their homes consist of little mounds with holes in the top and raised about a foot aloove the level ground. The mounds are no doubt formed from the earth taken from their burrows. They are seen from the train for quite a little distance, and in some places are very numerous; sitting or squatting on the ground near their holes, and as the train approaches they sometimes bark and get frightened and scamper away to their under-
ground homes. They are of a brown-ish-grey colour, and about as large as a good-sized black squirrel, and live on roots and grass. It is said that in thie winter an owl and a rattlesnake frequently occupy the same hole with the prairie dog, but whether the latter gives his consent to this arrangement is rather uncertain, and as to the truth of the statement I cannot vouch. Not far from here the Rocky Mountains are visible, on a clear day, in the far distance.

After a short stay in Cheyenne we proceed on our westward track again, and soon reach Red Buttes where we see peculiar formations of sandstone rising from 500 to $\mathrm{x}, 000$ feet above the plain, and taking all sorts of grotesque shapes which, from their very picturesque appearance, are interesting objects. About 220 miles west of Cheyenne, at a height of 7 , roo feet above the ocean, we reach the summit of the Rockies, or, at least, the highest part of them, on which the railway goes; but as it was night we were unable to get the view from this wild spot. We could, however, feel the cold, chilly atmosphere very well indeed, for it was freezing hard here, and our car windows were covered with thick ice. We are still nearly 1,200 miles distant from San Francisco, and for the next 100 miles or more pass through alkali beds and sage brush. About twenty miles distant from Ogden we see what is known as Devil's Slide, composed of two ridges of rock reaching from a point neil the railway track almost to the top of a low sloping mountain. The ridges are composed of narrow slabs of granite standing almost perpendicularly on edge, apparently about ten feet apart, and rising to a height of from 50 to 150 feet-the two ridges running parallel with each other. How they have been forced into this position it is difficult to imagine. We are now in Utah Terri-
tory, and not very far from great Salt Lake, the home of the Mormons. The scenery is in many places very wild and grand. Ogden is soon reached and passengers have to change cars from the Union to the Central Pacific Railway. At Ogden the elevation is about 4,300 feet, the distance from San Francisco, 882 miles, and from Salt Lake City, 36 miles. It would have been very interesting to have visited the latter place, but our travelling arrangements would not permit us to do so.

From here we hurry forward in a south-westerly direction across the great silver mining State of Nevada and on to California, climbing slowly up the eastern slope of the Sierra Nevada Mountains, pulled by two immense engines, through grand scenery, until we reach Summit Station, the highest point on this range which is crossed by the Central Pacific Railway, being 7,017 feet above the ocean, and 245 miles distant from San Francisco. Here we are surrounded by lofty mountain peaks stretching up their snow-capped tops ro,000 feet above the sea. From this point we pass through many miles of snow-sheds and tunnels in the midst of wild mountain scenery, but night bas arrived, and the views which the traveller by daylight might enjoy are in great part lost to us. Early on the following morning we awake, and find ourselves on the western slope of the mountains and nearing Sacramento, where the majority of our party separated ; some going to San Francisco and others to the north or the south. To some extent we were sorry that the tirae had come when we must part. During our five days of travel we had become more or less acquainted and interested in each other, and had found among our number genial companions. Now we are parting, perhaps never to meet again. If the short term of our com-
panionship has been well used, and if by word and deed we have set a good example to those with whom we have been even for a brief period fellowtravellers, how much of pleasure we may have given, what blessed results may follow. In life's journey this should ever ic our object. The companion of a day is with us on life's voyage through time to eternity. Our word or our example may influence him for weal or for woe. Let us ever strive to use our influence on the right side, whether it be little or whether it be much, abroad as well as at hon:e, among those we have never met before and may never meet again, as well as among those who have been our friends and associates for years.
On getting off the cars at Sacramento we could not help noticing the warm spring-like air, the country all around covered with green grass, and the gardens bright with evergreen trees and flowering shrubs and plants, with beautiful palm trees dotted here and there. We seemed to have arrived in a new world. We enjoyed the r.orning walk through this beautiful city, with its evergreen trees and flowers, and about the State Capitol which was surrounded with green lawn terraces and rows of cypress trees, palms and rose bushes. After having spent two or three cold days in crossing the mountains, the warm balmy breeze was particularly refreshing. About io o'clock a.m. we again started on our journey, by the Southern Pacific Railway, down through the San Joaquin (pronounced San Waukene) Valley, with the white tops
of the Sierra Nevada Mountains on our left far away in the distance, and over their tops white fleecy clouds, and still farther in the distance the blue sky, forming a beautiful background to a very pleasing landscape. Farmers were busy ploughing their fields and sowing their grain, and many of the fields were already covered with the spring-like green of the growing barley, wheat or oats. The autumn rains had come a short time betore and all nature was waking up from the slumber of the previous warm and dry months, the weather reminding me very much of the latter part of May in Ontariu. As night approaches we have to cross a range of mountains ai the lower end of this large valley, and we again missed seeing the wild and rocky scenery which is said to be here particularly good. Early in the morning we got off at a station called Saugus, where we had to wait until in o'clock for our train to Santa Barbara. After breakfast, ve employed ourselves in walking over the rocky h:lls about the station until the train at ived. Sharp at the hour, we are off again, and in a short time at our lef. we get the first glimpse of the great Pacific Ocean. The railway skirts along by the beach and the ocean breeze and the ocean view are both very refreshing. Early in the afternoon we reach our destination, having been travelling for seven days since leaving our dear Toronto. After all that we have seen by the way, we are still happy in thinking that we are citizens of no mean city. Before long I will have something to say about Santa Barbara and other points.

A man is already of consequence in the world when it is known that we can implisilly depend on him.-Lord Lyons.
Mr. Gray, a member of the Edinburgh School B ard, says that whatever might be said about the religious difficulty it did not
apparently have much weight with the parents of the childrea. In the Edinburgh Board schools out of 24.469 children orily 150 took advantage of the conscience clause, and only 230 were exempted from the teaching of the Shorter Catechism.

## SCRIPTURE LESSONS FOR SCHOOL AND HOME.

No. 27. Feeding the Four ThouSAND, ETC.
To read-St. Matthew xv. 27; xvi. $x 2$.
I. MRACLES of Healing. (293r.) The faith of Gentile woman just been rewarded-now miracles wrought for large numbers of Gentiles. Place was near east side of Sea of Galilee - having passed through Decapolis. (St. Mark vii. 31.) Christ, as often, on a mountain side. His fame has spread-large crowds come-stay three days-all their sick brought to Christ-at once healed. Notice :
(a) Their faith in Christ's power.
(b) Their help to each other in bringing helpless.
(c) Their gratitude, in praising God.

Isaiah's prophecy fulfilled (Isa. xxxv. 5, 6), and Gentiles taught to believe in Israel's God. Thus Christ lightened the Gentiles. (St. Luke ii. 32.)
II. Miracle of Feeding. (32-39.) Five thousand Jews lately fed, now four thousand Gentiles.

Differcnces between miracle of 5,000 and 4,000:

MIRACLE OF FIVE THOUSAND.
(a) People been with Christ one day.
(b) Those fed were Jews.
(c) They sat on the grass.
(d) Disciples asked Christ.
(c) Five loaves, two fishes.
( $f$ ) Twelve baskets left.
(g) Baskets were small.
Blessing the food; sitting in order; giving to disciples to distribute ; Christ sending away multitudes-same in both. Lessons also the same.
III. Leaven of Pharisees and Sadducees. (xvi. 1-t2.) Pharisees befort this tempted Christ, seeking signs (xii. 38), now join Sadducees to tempt Him. Bitter enemies of each other join against Christ. What signs had they had?
(a) Prophecies of place of His birth, Virgin Mother, adoration of Gentiles, etc.
(b) Miracles of healing, feeding, etc.

But wanted special sign at special time at their bidding. Christ would give no more except point out Jonah as type of His resurrection. Sadducees disbelieved resurrection, so Christ repcats previous saying (xii. 39, 40) for their benefit-refuses further answer.

Christ uses Pharisees and Sadducees as warning.

Leaven (or yeast) makes dough to rise.

Its spreading used as type of spread of Christ's Church (xiii. 33). Here, its decay used as warning.

Leaven of Pharisees-pride, hypocrisy, formalism.

Leaven of Sadducees-profanity, forgetting God.

Also the doctrine of these false teachers (ver. 12).

Disciples thougnt Christ was speaking of ordinary bread, forbidding them to eat with the Pharisees. What does their question show?
(a) Want of faith in Him to supply their want.
(b) Forgetfulness of His recent miracles.
(c) Spiritual blindness in not understanding.

Lesson. TWe walk by faith, not by sight.

No. 28. Testimony to Christ.
To read-St. Matthezu xvi. x3; xvii. 13.

1. Christ acknowledged. (xvi. 13-20.) The place. Cæsarea Philippi at the extreme north of Palestine. Christ retired there for prayer (St. Luke ix. 18), as befure His baptism, so now before His Transfiguration. The question. What is the current opinion about Me? Phrase, "Son of Man," only used of Christ by Himself. The answer. Some, as Herod, think Him John the Baptist risen from the dead. :ome think Him Elijah foretold by Malachi (Mal. iv. 5) ; wthers, the prophet foretold by Moses (Deut. xviii. 15). What does St. Peter say ? Christ, i.e., anointed Messiah-sent from God.
Son, i.e., the only begotten son of the Father.
St. Peter's reward for this confes sion-
(a) Nerv blessedness as taught by God Himself.
(b) Nerw name-Peter or "stone" part of a rock-as defender of the faith.
(c) Aew honour-as preaching and helping on the Church of Christ. Christ Himself is the rock (Eph. ii. 20), the corner-stone ( x St. Pet. ii. 6), the foundation (Isa. xxviii. 16); as such should prevail against His enemies, should build His Church.
II. Chist Denied. (21-28.) Christ, having just spoken of His Kingdom now foretells His sufferings, etc.pain, death, resurrection. Peter, foremost to confess Him, now foremost to rebuke Him. How is he answered ? Same words said to him as to Satan in the wilderness. Why? Because tempting Christ to give up the pain He must suffer. Peter, just now a
rock of strength, has become an "offence," i.e., rock of stumbling, because was thinking as man thinks, not the things of God.

As Christ, so shall His followers be. They must-
(a) Deny themselves, as did Joses. (Acts iv. 37.)
(3) Lose life if need be, as St. Stephen.
(c) Receive future reward. (Heb. xii. 2.)

The soul worth more than all in the lite. Why? Because it is undying, capable of infinite happiness in Christ's kingdom.
iII. Christ Transfigured. (xvii. 1-13.) Three chosen disciples catch glimpse of glories of Christ's Kingdom. The time evening. The place, thought to be Mount Tabor, north of Palestine. The vision, bright cloud coming down, Christ's face lighted up like the sun, His raiment shining, His companions Moses and Elias. The conversation, not about His kingdom and glory, but about His death. (See St. Luke ix. 3 r.) Three persons spoke.
(a) St. Peter wanted to make tents and stay in glory of the vision.
(b) Moses and Elias spoke of the glory of His death.
(c) God the Father glorified Christ, and bade all listen to Him.

Disciples fall asieep - Christ remains communing with the FatherMoses and Elias return to heavenChrist wakes disciples, cheers them with His voice, and all descend mountain.
leessons. I. The blessing of communion with God.
2. The duty of listening to His voice.
3. The glory of self-denial, suffering for Christ.
4. The eternal glory of heaven.

## EDITORIAL NOTES.

All true educators in Canada mourn the departure of Prof. Young from the great work of his life here, but some where else he rejoices in the perfect Light. A notice of our friend will appear in the April number of The Monthly.

We are sure our readers will turn with interest to the appreciative article on "Queen's University and What it Has Done for Canada," by Fidelis. As is well known, the University during the last few years has owed much to the interest taken in it by its active Chancellor, Mr. Sandford Fleming, who has been one of its warmest and most faithful friends.

Matriculation Examinations.It affords us pleasure to direct the attention of our readers to the timely and valued contribution of Sir Daniel Wilson, President of University College, Toronto, on this question which is under consideration at present, and is of special importance to the High Schoo's and Collegiate Institutes. We consider the schools, at such a juncture, fortunate in having such an experienced and able adviser as the learned President of University College.

The English Bible.-The most hopeful sign of our time is the dissatisfaction shown on every hand with the inadequacy of the provision made for the learning and teaching of the truths contained in the Bible, the only book, amongst the heap of books of
modern days, commanding, when understood, the universal homage of the human spirit. Synods of Episcopal Churches, Conferences of Methodist Churches, General Assemblies of Presbyterian Churches, the representative courts of all denominations cry out aloud, telling of the duty resting upon the parent, the Church and the State to give earnest heed to this vital part of the education of our youth. Never has the religious press been so active in pressing on the attention of the public the absolute necessity of attending to the proper nurture of the men and women of the future. Most significant of all, magazines and educational journals are joining in this good work, and their representatives interviewing leaders of thought throughout the Continent as to the best methods of securing sound moral culture and religious training in the public school. What answer comes from those thoughtful men, what is their contribution to this ever-living question? Almost without exception they state, Let ycur teachers be Christian men and women and found your instruction upon the Bible, the whole Bible, now for emphasis sometimes called the Saxon Bible. Now to us both sides of this questior, are eminently satisfactory, the discontent and the remedy suggested. Most assuredly the people who brcome "the people of the Book" are secure as far as liberty here is concerned, and their face is steadfastly set in the direction of eternal freedum.

The Lord reigneth, let, the earth rejoice.

[^4]years, and at a cost of only some $\$ 300,000$, the insects were almost destroyed, and it now costs but $\$ 8,000$ a year to keep the land free from their ravages. $-E_{x}$.

## SCHOOL WORK.

## MATHEMATICS.

Archibald MicMurchy, M.A., Toronto. Editor.

## SOLITIONS TO PROBLEMS IN FEBRUARY NUMBER.

73. Solve $x^{y+z}=y^{p+z}=z^{z+y}$ and $x^{a}=y^{b}=z^{c}$ where $\delta$ is the harmonic mean between $a$ and $c$.
74. Take logarithms, $\therefore y+z) \log . x=$ $(z+x) \log . y=\& \& a \log . x=\delta \log . y=c \log$. $: \& b=\frac{2 a c}{a+b} \therefore$ by division $\frac{y+z}{a}=\frac{x+y}{c}$,
but $\left.y=x^{\frac{a}{b}} \& z-x^{\frac{a}{c}} \therefore c^{\frac{a}{b}} x^{\frac{a}{b}}+x^{c}\right)=$
${ }_{a}\binom{a^{a}}{x+x^{n}} \therefore x=0 \& c$., is one set of values
Alsoc $\left(x^{\frac{a-b}{b}}+x^{\frac{a-c}{c}}\right)=a\left(1+x^{\frac{a-b}{b}}\right)$
Substitute for $b$ in terms of $c$ and we get $(c-a) x^{\frac{a-c}{2 c}}+c x^{\frac{a-c}{c}}=a$.
Solving this quadratic $x=\left(\frac{a}{c}\right)^{\frac{2 c}{a-c}} \& y=$ $\left(\frac{a}{c}\right)^{\frac{a+}{a-c}} \& z=\left(\frac{a}{c}\right)^{\frac{2 a}{a-c}}$. Other values $\begin{gathered}\text { may be found. }\end{gathered}$
75. If $\frac{a^{2}-b^{2}}{l-m}=\frac{a b}{c}$ and $\frac{b^{2}-c^{2}}{m-n}=\frac{b c}{a}$
prove that $\frac{c^{2}-a^{2}}{n-l}=\frac{c a}{b}$.
76. $\frac{a^{2}-b^{2}}{l-m}=\frac{a b}{c} \therefore c \frac{\left(a^{2}-b^{2}\right)}{a b}=l-m$, $\therefore l-m=\frac{a c}{b}-\frac{b c}{a}$ also $m-n=\frac{a b}{c}-\frac{a c}{b}$
Adding we have $n-l=\frac{b c}{a}-\frac{a b}{c}$

$$
\therefore \frac{c^{2}-a^{2}}{n-l}=\frac{c a}{b} .
$$

75. Three equal circles of radii $r$ touch each other (two and two) ; find the area of the space intercepted between the circles, and show that the radii of the circles that touch all three are $\frac{2 \pm \sqrt{3}}{\sqrt{3}} r$.
76. (a) By joining the centres we have an equilateral triangle of side $2 r$, whose area is $r^{2} \sqrt{3}$. Thie area of each sector thus formed is $\frac{1}{6} \pi r^{2}$. Subtracting the areas of the three sectors from the triangle we have $r=\sqrt{3}-\frac{\pi r^{4}}{2}$.
(b) The intersection of the perpendiculars on the opposite sides in the above triangle is the centre of both circles required and the radii are $3 \cdot r \sqrt{3} \pm r$.
77. The hour, minute and second hands being on the same centre and moving uniformly; find in what time the second hand would divide the angle between the hour and minute hands in the ratio of $m: n$ after a minutes past $b$ o'clock.
78. In $\frac{60(60 n a+5 n b+12 m b)}{708 m+719 n}$ seconds.
79. The angles of a triangle $A B C$ are bisected by lines cutting the sides; show that the product of the alternative segments of the sides $=\frac{a^{2} b^{2} c^{2}}{(a+b)(b+c)(c+a)}$.
80. By Euc. VI. 3, the side $A B(c)$ is cut in the ratio of $a: b, \therefore$ the segments are $\frac{b c}{a+b} \& \frac{a c}{a+b}$ similarly for the other sides. Hence the product of the alternate segments is easily found.
81. From a point within a circle straight lines are drawn, such that the circumference divides them in a given ratio; find the locus of the external (or internal) points.
82. Let $A$ the given 'point; $C$ the centre of the circle. Produce $A C$ to $D$ so that $A C$ and $C D$ are in the given ratio. By Euc. VI. 2 and 4, it can easily be shown that the distance from $D$ to the extremeties of all the lines is constant. Hence the locus is a circle with centre $D$.

Solutions also received from D. F. H. Wilkins, B.A., B.Sc., High School, Beamsville ; and L. J. Cornwell, B.A., Mathematical Master, High School, Farmersville.

## CLASSICS. <br> G. H. Robinson, M.A., Toronto. Editor. <br> BRADLEY'S ARNOLD. Extrcisk 18.

## вY А. M.

1. Ne igitur tantre huic occasinni defucris, sed potius sempiternos republire nostise hostes te duce opprimamus. 2. Nolttote, cives mei hostes qui ce lem vobis, servitutem que minitantur nurncrare; candem potius illi fortunam quam nobis intendunt, experiantur. 3. Huic mere culpa ignoscas velim, et fac meminers me, qui hodie peccavi, per. sacpe tibi antehac opem tulisse. 4. Servi igitur esse nolimus, audeamusque non solum ipsi liberi fieri, sed patriam quaque in libertatem vindicare. 5. Quocirca prolffleta patria, pro exulantibus amicis, omnia (or quidvi-) perferse ne recusaveris. 6. Quocirca (or quamubrem), cives nolite credere me, qui vos toties in aciem duxi, horlie ne fortuna nos deserat pertimescere. 7. Iidem simus in acie qui semper fuimus; de eventu proclii DI viderint.

$$
\text { Ex. } 19 .
$$

1. H ec certe dicere ausim, me et primum tibi suasisse ut hoc opus susciperes, el pollicerime ultimum moniturum uti ceptum onittas (or incepto desistas). 2. Quid facerem ? inquit, quid dicerem? quis me culpare velit quod tam perditos homines audire nolui. 3. Hæc omnia eum providisse neque negaverim neque affirmaverim, sed cavere debuit ne tants casibus opprimeretur civitas. 4 Eo die frater meus te auctore a prolio aberat; adfuisset ulinam; melus enim fuit in acie perire quam tantam perpeti ignominiam. 5. Protantis igitur beneficiis gratiam velim non solum habeas sed eliam referas. 6. Vellem (or utinam) mihi milites quos optimos tecum habebas misisses. 7. Stabant milites instructi acie, pugnandi cupidi, oculis in hostem difixis (or intentis) signum flagitantes; crederes epulas expectare. 8. Vobis potius id quod facere debui, quam mihi consului; quod utinam ne mihi unquam vitio vertatus.

$$
\text { Ex. } 60 .
$$

1. Quem etsi facti hujus neque pœenitet neque pudet, tamen sceleris sui pœnas mihi
persolvet. 2. Cujus culpec quamvis ignosci non posset, tamen tot cjus in rempublicam meritorum ratio tibi habenda fuit. 3. Quem quamvis nocentem, quamvis sceleratum, nemo tamen abientem reum facere, et incog. nita causa condemnare debet. 4. Qai quarquam nocentissimus est, et gravissimo sup. plicio dignissimus, tamen facere non possum, quin hanc cjus \&fflictam fortunam cum pristina illa felicitate alque gloria conferam. 5 . Tametsi miscrum est innocentem in suspicionem atque crimen venire, tamen melius est aboolvi innocentem quam nocentem non accusari. 6. Qui quamvis fuisset sceleratus, quamvis omni condemnatione dignissimus, melius tamen furt nocentes decem absolvi, quam unum innocentem condemnari. 7. Cui quar quam principatus stque itaperium omnium civium sententiis delatum fuit ac mandatum, diu tamen rempublicam attingere noluit, et unus meis temporibus ad summos honores invitus et fere coactus pervenit. 8. Quo metu liberatus, brevi tamen in pejoris flagitii suspicionem veni, et nisi tu mihi subvenisses, inimicorum odio et insidiis oppressus essem. 9. Te vero tametsi tot malu perpessus es, fore aliquando non so'um felicem, sed etiam -id quod raro hominibus contingit-beatum fore, credo.

## MODERN LANGUAGES.

Editors $\left\{\begin{array}{l}\text { H. I. Strang, B.A., Goderich. } \\ \text { W. H. Fraskr, B.A., Toronto. }\end{array}\right.$

## EXERCISES IN ENGLISH.

1. Substitute words for the italicized phrases:
(a) He devoted himself to it with energy.
(b) He made a more than human eff int.
(c) He paid no attention to my advice.
(d) He speaks it as well as a person born in the country.
(e) He spoke with contempt of the policy of the emperor.
2. Contract into simple sentences :
(a) His father died and left him only his blessing.
(b) Perhaps he thought that that would be the wivest course.
(c) He was quite surprised when he heard that you had arrived.
(d) You will find that you will be compelled to do that.
(c) We expecter that they would meet us at the station when we returned.
3. Form (a) adjectives from palace, fire, method, effect, fraud, merit.
(b) Nouns from fail, propose, private, pre. tend, brief, resolve.
(c) Verbs from just, prison, fertile, dew, spell, habit.
(d) Adverbs from truc, suitable, voluntary, gay, heroic.
4. Write sentences, using the following words and phrases, with as many different grammatical values as you can: "rival," "less," "past," "in the book," "to tell him the answer."
5. Write out all the inflected forms of know, child, this, one, he, old
6. Change the following sentences first to the negative and then to the interrogative form :
(a) He knows the answer to it.
(b) He told a lic about it.
7. Rearrange the following sentences so as to change the place of popliar and great, and tell what is gained by the change :
(a) A tall poplar stood just beside the entrance.
(b) Owr surprise at secing him was great.
8. Fill the blanks in the following with who or whon:
(a) ——_ do you think we snw?
(b) —_do you think it was?
(c) ——do you think gave it to me?
(d) ——_ do you think I got it from?
(e) - do you think he took me to be?
9. 3 reak up into four simple sentences: Just as he was about to cross the road a little ragged child spoke to him and begged him to buy a bunch of flowers which she held in her hand.
10. Combine (a) into a simple sentence : She han a poverty-stricken appearance. He pitied it. He put his hand into his pocket. He intended to give her a penry.
(b) Into a compound sentence: He hnped to overtake them. He hurried on. It was growing darker. He was unaccustomed to the words. He soon lost his way.
(c) Into a complex sentence: There was no way of cscape. He saw this. He would not be taken alive. He would rather dic by his own hand. He had fired the falal shot.
$(d)$ Into a compound complex sentence: There was a ring at the door. She heard this. She turned to leave the room. She had opened the desk. In her haste she forgot to lock it.

> CLASS-ROOM.

## ARITHMETICAL PROBLEMS ON THE WEIGHTS AND MEASURES.

1. How long will it take a train 25 rods long, running at the rate of 30 miles per hour, :o cross a bridge 82 yds .1 ft .6 in . long? Ans. 15 secs.
2. A Canadian bought a horse in Canada for $\$ 100$, and after shipping it to Enpland at a cost of $£ 295.64 . \mathrm{s}$ erling sold it there for £26 125. 6d. Fund his gain in Canadian currency.

Ars. \$17.53.
3. A speculator has a village site containing 2 acres 16 sq. rods, which he determines to divide into lots, each containing to sq. rods $5 \frac{1}{2} \mathrm{sq}$. yds. How many will he have ?

Ans. 33.
4. A debtor pays $\$ 24.50$ in dollar bills, fifty cent pieces ant twenty-five cent pieces, using seven fewer of the last than of the first, and the same number of the first as of the second. How many c ins did he dispose of?

Ans. 23.
5. A man, after paying an income-nax of 6 mills on the dollar, has a net income of $\$ 994$. How much wou'd he have saved had the tax been only 5 mills on the dollar?

Ans. \$1.
6. A certain distance when measured by a yard-stick an inch too long appears to be 19 rods $\frac{7}{2}$ yd. What would it have measured if the yard-stick had been an inch too short?

Ans. 111 yds.
7. Find the amount of the following bill: 6 quires of paper, at $\$ 125$ per ream ; 35 lbs . salt, at if cents per stone; 20 lbs. clover seed, at $\$ 4.50$ per bush.; 49 lbs . flour, at $\$ 6$ per bbl.

Ans, $\$ 3.65$.
8. A train 22 yds. long is running at the rate of 30 miles per hour. How long will it take to pass:
(a) A man standing still?
(b) $\Lambda$ man going in the same direction 5 miles per hour?
(c) A man going in the opposite direction 7d miles per hour?

Ans. (a) 15 sccr.; (b) 18 sccs.; (c) 12 secs.
9. $A$ bin is 9 ft . long, 7 ft . wide. 3 ft .8 in . deep. The difference in cost between filling it with hard coal and with soft coal at the same price per ton is $\$ 7.75$. Find the price of coal per ton. Ants. $\$ 5.50$.
10. $\Lambda$ ten acre field surrounded by a fence is 40 rods long. Find the difference in cost between building a walk 3 ft . wide around the outside of the fence, and around the inside of the same fence. Lumber worth $\$ \mathrm{ro}$ per M . Ans. 72 cts.

## NORTH YORK UNIFORM PROMOTION EXAMINATIONS.

DECEMBER zith, $^{2888}$.

## arithmrtic-to iv. class.

I. Define-Reduction, perimeter, prime number, concrete number, greatest common measure, a square, a cube, mixed number. [16]
2. Which are cheaper, eggs bought at the rate of 7 for toc. or at the rate of 12 for 17c.? How much would be gained on 119 dozen bought at the cheaper rate and sold at the dearer? [12]
3. How much will it cost at $\$ 1.12$ the sq. $y d$. to pave a street 89 rods long by 78 ft . wide ? [12]
4. How much would it cost at 22 cents per square yard to paint the walls of a rectangular room $27 \times 13$ feet, $6 \times 11$ feet, deducting two doors $7 \times 4$ feet, and three windows 5 feet 10 inches by 4 feet? [14]
5. How many yards of stair carpet will be required for a straicht stair of twenty steps II inches wide, with 7 inches rise, allowing I yard extra at top? [12]
6. A can hoe a row of corn in 10 minutes, $B$ in 12 minutes, $C$ in 18 minutes, and $D$ in 20. If they all start toge her, how many hours will it be until they all finish a row at
the same moment? How many sowe will each have then hoed? [12]
7. Onc-eleventh of a farm is worth $\$ 19.80$ more than one-lwelith of it. Find the value of two-fifths of the farm. [12]
8. Find the G. C. M. of 1628,2882 and 4543. [10]

```
GEOGRAFHY-TO IV. ClASS.
```

1. Define: Plateau, archipelago, estuary, latitude and longitude. [10]
2. Draw an outline map of N. America; enter the four principal rivers, and indicate the chief mountain ranges. [12]
3. Why is Montreal the chief city of Canada? [7]
4. Why is Toron'o the chief eity of Onlario? [8]
5. Give the situation of Vancouver, Calgary, Winnipeg, Port Arthur and Three Rivers. [10]
6. How do (1) railways, (2) canals benefit a country? [16]
7. What goods are exchanged between (1) The Dominion and the United States, (2) The Dominion and England? [12]
8. Name the ten chief commercial eentres of N. and S. America. [20]
9. Compare the east and west consts of N. America with regard to (1) form, (2) climate, (3) 「rade. [15]
gramimar and composition-to iv. class.
Nore.-Candidates may have a choice between 6 and 7, only one of which must be taken.
10. Define: Sentence, subject, predicate. Show by means of an example that in order to have a sentence we must have not only words of different kinds but also a proper arrangement of these words. [12]
11. Underline the pronouns in the following: (a) George is a carcless boy, he does not read well. (b) I told you to tell William that he must not touch any of these. Snow alsn by means of these examples the meaning of the following extract from the text book, giving special attention to the italicized clause: "Thus the pronouns are a sort of general names, or general substitutes, when circumstances make their meaning plain, for ordinary names." [12]
12. In the following point out the connecting worts, giving them their arammatical names, and telling what they connect, also give the grammatical value of the underlined words, phrases and clauses: " In many ways William was kiod to me, while $I$ seas urner his charge; but he would naier consent to my going to school, nor would he listen to any one who hinted that $I$ stessld learn a trade." [18]
13. Give one example each of the following : Assertive sentence, interrogative sentence, imperative sentence. [6]
14. Point out and claseify the nouns in the following: "Sir William said that the prisoncr's innocence had been clearly proved, and charged the jury to return a verdict accordingly. No doubt," he said, "the man had been seen driving the mare, but according to the manservant's evidence he was driving it to and not from the farmer's stable." [24]
15. Show cleart; by examples the difference between co-ordinating and subordinating conjunctions. [8]
16. "Case is a change of form that nouns and pronouns undergo to indicate their relation to other words in the sentence." Show from the following examples just what the above definition means: (a) I sec him and he sees me. (b) Where is John's horse? [8]
17. Write a composition of not less than seven sentences on one of the following subjects: Fruit, school-days, Christmas. [1r] hiterature and dictation-to juin. ill.
18. Tell the story of "The Whale," or "The Ostrich." [15]
19. Write out the first five verses of "The Children's Hour." [10]
20. A fox stole into a vineyard where the ripe suntry frute was trained on high in a most tempting manner. He made many 2 spring after the luscious prize; but, failing in all his attempts, he muttered as he retreated. ''Well, what does it matter, the grapes are sour?"
(a) What name do you give to this kind of story.
(b) What lesson does the story teach ?
(c) Write out the story in your own words.
$(d)$ Give the meaning of the italicized phrasce. [26]
21. Gay little dandelion Lights ut the mends Swings on her slemder poop. Tellreh her beads.

High rides the thirsty sun
Ficrcely and high,
Faint littie dande ion Closeth her cye.
(a) Give the meaning of the f:alicised parts.
(b) Why speak of the sun as thirsty and riding firucely 1
(c) Why does the dandelion become faint and clase her cye? [0]
5. In a certain Cornish mine two men. deep down in the shatt. were engaged in putting in a shot for blasting. They hord completed their affair and were about to give the signal for being hoisted up. One at a time was all the assistant at the top could manoge, and the second was to kindle the fuse and then mount with all speed.
(a) Give the meaning of the italicized phrases.
(b) Tell the rest of the story. [18]
6. Dictation: page 150 , from "I fell into" to " with fern." [15]

GEOGRAPIY-TO JUN. III.

1. What is the position of the sun when the shadow of a post in the play-ground is shortest ? [6]
2. How would you draw the lines from the post that would show the N., S., E. and W. exactly? [12]
3. Draw a map of a garden, showing the flower-beds, paths and trees. [12]
4. Draw neatly a $m p$ of the township in which the school-house stands, marking the four most important points. [ 187
5. What is a f. $m$, creck, hill, slope, field, marsh, pond, meadow, road and village? [20]
6. Draw a map of the county, showing the townships and the four most important points in it. [18]
7. Tell where the following animals are found: The lion, tiger, elephant, ostrich, whale, reindeer and white bear. [14]

## CONTEMPORARY LITERATURE.

The Fxamination Papers of the Universily of Turonto for 1888 . This useful book grows perceptibly larger year by year. The lists and other information usually appended duly appear.

Catalogue of the Collections in the Museums of the Universtly of North Dakota. Prepared by Professor Henry Montgomery, M.A., B. Sc., Ph. B.

Orthoèpy Made Easy. By M. W. Hall. (Syracuse: C. W. Bardeen.) A series of thirty-eight exercises on the pronunciation of difficult words, each exercise having a key printed on the opposite page.

Primary Writing. By Mara L. Pratt. (Boston: Eastern Educatinnal Bureau). The little pamphlet bearing this title contains a descripti $n$ of an ingeninus, sensible, int + resting way of teaching writing to little children.

Macbeth. (London: Moffatt \& Paige.) We can but repeat the favourable opinion formerly expressed of the annotated editions of Shakespeare's works published by this firm. They are good: it would be difficult to improve them.

What is Polrtical Science? By Professor W. J. Ashley, M.A. (Toronto: Rowsell \& Hutchison.) We are glad to see that Professor Ashley's inaugu al lecture delivered at the opening of the present college year has been reprinted. Many of our readers will doubtless be glad to have an opportunity of reading and thinking over it.

Miffatt's Deductions. (London: Moffatt and Page.) A collection of exercises on the first six books of Euclid is here given, all fully worked out. A sufficient number of easy deductions on the first book is supplied and the exercises are carefully graduated. We have no doubt that many teachers will find it extremely useful.

Allen and Greenough's Latin Grammar. (Boston: Ginn \& Co.) A revised edition of the Latin Grammar, improved and enlarged, has just been published. The number of
examples has been increased, and we are sure that the revised edition will meet with the sime success that former editions merited and have already $r$. ceived.

The Argument for Manual Training. By President Butler. (New York and Chicago: E.. L. Kellogg \& Co.) At the meeting of the American Institute of Instruction last year at Newport, Rhode I-land, President Butler presented the subject of manual training in a paper which is here reprinted as the eleventh number of Messrs. Kellogg's Teachers' Manuals Series. The paper is a valuable and timely one.

Mr. D. B. Read, Q.C., of this city, is to be congratulated upon the appearance of The Lives of the Fudges of UpDer Canada and Ontario. He has performed his arduous, though pleasing tav, in a manner highly creditable to him, and the book will doubtless fill no unimpo tant place among work; of Canadian bingraphy. Ontario has reason to be proud of and thankful for the integrity and ability that have characterized her judges.

Elements of Plane Analytic Geometry. By Prof. Runkle, of the Massachusetts Institute of Technology. (Boston: Ginn \& Co.) The author has prepared this elaborate text-book with special reference to the studies and requirements of the students at the Massachusetts Institute of Technology, by whom a large part of the book has already been used for some time. The elementary part of the work is presented in a full and satisfactory manner, and the concluding chapters on "Sywems of Conics," etc., founded on the "Elementary Treatise on Conic Sections" of Mr. Charles Smilh, of Cambridge, will be found $\epsilon$ qually valuable.

## A Course of Easy Arithmetical Examples

 for Beginners. By J. G. Bradshaw, B.A., Assistant Master at Clifton College. (Landon and New York: Macmillan \& Co.) The ordinary text-books and collections of anthmetical examples do not all provide asufficient number of easy examples, though good teachers know that it is a mistake to obstruct the attempts of a beginner to understand a principle by placing before him too soon questions containing numerical difficulties. This collecti $n$ avoids that error, and is also a good one in other respects.

Systems of Education. By, John Gill, Professor of Elucation, Normal College, Cheltenham, England. (B ston : D. C. Heath \& Co.) Profe-sor Gill's valuable book has been reprinted fiequently, the present being the fourteenth edition. It is gratifying to find that su good a book has been appreciated, and it is refreshing and stimu'ating to read and study the lives and work of the best and worthiest of the profession. This is none the less true, though we may be reading these biographies for the second or third time.

Two numbers of a new Canad an m?gazine have been published since the beginning of this year. Canadiana is edited by Mr. W. J. White, M.A., Vice-President of the Socie'y for Historical Studies, and has a neat and attractive appearance. It is really a magazine of Canadian history, though its modest sub-title terms it "A Collection of Canadian Notes." A valuable paper on "Canadian Histories" forms part of No. I., and is continued in No. 2, while the remaining pages are occupied with Notes, News of Sucieties, etc.

The Youth's Companion is publi,hing at present a good story enti led "The Proving of Franz Seibel." There are always two serials current in the Companion, but these are not its greatest attraction, for this paper is noted for interesting articles on matters of present and general importance; such as those recently inserted on the English Parliament, by Mr. Justin McCar hy. Short, pointed anecdotes and jokes, stories of adventure, etc., may always be found in this excellent publication.

Rrcent numbers of Littell's Living Age contain articles by Lord Wolseley, Mr. Gladstone, the Duke of Argyll, Oscar Wilde, and other well-known public men. For the sake of any one of these articles, the issues would
be well worth having, but there are many others, e.g., "On the Slopes of Oiympus," from the Gentleman's Magazine; "From a Canadian Bank Clerk's Nute-book," Chambers' Magazine; "The German Emperor's Student Days," "The Crofters," etc., etc. The Living Age, once enjoyed, is almost indispensable.

Elementary Commercial Gergraphy. By Hugh R. Mill, D.Sc., F.R.S.E., F.R.S.G.S., Lecturer at the University of Edinburgh. (Cambridge: At the University Pre . London: C. J. Clay and Sons.) This wil be one of the mo:t pupular volumes of the Pitt Press beries. Few inte ligent peuple will lay it down without finishing it. It is a brief sketch of the commoditie; and countries of $t$ e world, full of carefully selented and interesting practical information.

The current number of the Eclectic Magasine (now published on the first of the month) cont,ins, besides Lord Wolseley's article on "War" and Mr. Gladstone's on "Daniel O'Cunnell," and Mr. Wilde's on "The Decay of Lying," "A Pstriarch's Thoughts about French Women," by M. Jules Sumon, and a most instructive discusion by Sir Frederick Leighton, President of the Royal Academy, about the present condition of English art. One more article (a good one this time) about the "Higher Education of Women," short stories, a beautiful puem by Sir Theodore Martin, and other attractive reading help to make up a very $g$ od number.

The Ieacher's Psycholugy. By Prof. Welch, of Iowa Agricultural College. (New York: E. L. Kellugg \& Co.) P of. Welch's book is entiled "A Treatise on the Intellectual Faculties, the Order of the Growth, and the Corresponding Seriss of Studies by which they are Elucated," by which it will be seen that the aim of the book is practical, and that it is therefore likely to be of value to the thoughiful teacher. The introduction of the subject, and the method of treatment adopted by the author are particularly good. We think this book very suitable for a teacher's library.

The Popular Science Monthly for March presents a readable article entitled, "A Pane
of Glass," by Professor C. H. Henderson. The same number contains the concluding portion of Dr. Andrew White's article on "Demoniacal Possession and Insanity." Dr. Andrew White "seemeth to be somewhat," but, we think, many thoughtful readers will say, "he addeth nothing to me." Probably the best article in the number for most of our readers, will be that on "Natural Science in Elementary Schools." Sometimes the Popular Science is worth reading carefully, but at other times it is somewhat unsatisfactory, and many of its writers seem to have atheistical tendencies, so that its pages are occasionally disgraced by remarks about Christianity which are too spiteful to be scientific.

The frontispiece of the February English Illustrated is a fine engraving of Moroni's Portrait of a Lawyer. Mr. F. Marion Crawford's new serial, Sant' Ilario, is continued ; also a historical tale, "The House of the Wolf,' by Mr. Stanley J. Weyman. The latter opens with a description of the streets of Paris after the massacre of St. Bartholemew, which was vividly described in the January instalment. The promised article on "Moated Houses" appears, with many beautiful illustrations, while travel papers on "Cognac" and " Dardt," and "Coridon's Song,' from Walton's Complete Angler, and Mr. H D. Traill's department help to make up a good number of this magazine which
will always be a favourite among refined and educated people.

Lectures on the History of Englased. By M. I. Guest. (London and New York: Macmillan \& Co.) We had the pleasure of reviewing, some time since, the American edition of this excellent book, revised by Mr. Underwood to suit American schools (some of the best and most patriotic passages being necessarily omitted or spoiled), and now gladly avail ourselves of the opportunity afforded by a reprint (the second since 1879) of the Eng, ish edition to invite the attention of our readers to a work which we consider the best hrief history of our country and people we have ever seen. Professor Guest and his pupils in the College for Men and Women (London), having "wandered for some time in the intricate mases of modern English grammar," turned to the study of English history as likely "to bring more interest, variety and fruitfulness to our work." The author writes of the England of long ago, and of later times, in such a brilliant, patriotic, vividly-descriptive manner that everything seems real, and we feel that we have an interest in it. There is not a dull page in the book. The volume is not quite as large as Mr. Green's admirable Short History, and is gotten up in the beautiful and finished style characteristic of all Messrs. Macmillan's work.

## PUBLISEER'S DEPARTMENT.

The best educational journal is THE TEACHER'S BEST FRIEND.

Renew your subscription. Subscribers in arrears are respectfully requested to remit the amount at once.

Noily us at once of any change of address, giving the old address as well as the new.

Accounts will be rendered from time to time, and prompt payment of the same will be expected. Specimen copies sent free from tinis office to any address.

Our readers will observe that special attention is given to examenation papers in this Magazine; in many cases hints and solutions are added. We hope subscribers and others will show in a practical way their apprecia-
tion of the valuable work done by the editors of the different departments of The Monthly.

We are grateful to the friends of The Monthly who have, from many different places, sent us letters of approval and encouragement, and request their kind assistance in getting new subscribers for 1888.

The Editor will always he glad to receive original contributions, especially from those engaged in the work of teaching.

Bound cupies of this Magazine in cloth may be had from Williamson \& Co.. or from James Bain \& Son, King Sireet, Torento, for \$1.00 per copy.


[^0]:    * Public Lecture at Trinity College.

[^1]:    My only beaks
    Were woman's looks,
    And folly all they taught me.

[^2]:    *Discours sur la Methode. Part I.

[^3]:    * Quoted by Sir John Lublock.

[^4]:    When the English took possession of the Iiland of Cypress it was annually ravaged by grasshoppers to such a degree that its crops were hardly worth consideration. In five

