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## THE CANADA

## EDUCATIONAL MONTHLY

AND SCHOOL MAGAZINE.

MAY-JUNE, 1883.

QUEEN'S COLIEGE CONVOCATION.

## CHANCELLOR FLEMING'S ADDRESS ON UNIVERSITY LEGREES.

WHATEVER the origin of university degrees, whether they may be traced to a siagle controlling circumstance or to the public exigencies, which from time to time have arisen, it cannot be doubted that the practice of granting such distinctions and the usages connected with them are of great antiquity. The period when degrees were first conferred cannot be distinctly stated ; it has, however, been traced back generally to the . undation of universities, and although there is much which is traditional with regard to the earliest of these institutions, we have in this circumstance a clue to the history of the long-established usage.

Admitting that academic degrees are coeval with universities, and there seems to be little doubt on this point, we can trace the ceremony to be celebrated in this hall to-morrow far back among the centuries, certainly to the Middle Ages, if not to a remoter period.

Taking the four universities of Scotland, the oldest, St. Andrews, was fuunded by Bishop Wardlaw in 141. In Irelar:d, Trinity College, Dublin, was founded under the authority of Pope John XXII. in 1320 . In England, Oxford, the oldest, was performing the functions of a university before the end of the 12 th century, while the University of Paris and other European continental schools were marked by great activity at even earlier dates.

On this continent we do not claim any great antiquity in scholastic establishments; but if we take a general view of Europe we find a distinct historical record of antecedent scholastic life during which we are warranted in assuming that the ceremony of conferring degrees has been observed. We find that this record extends in Scotland, Ireland, Switzerland, Spain, Belgium, Denmark and Sweden, over four and a-half centuries.

In Germany and Austria over five
centuries. In Portugal over six centuries. In England, France, and Italy, tuearly eight centuries.

If credit is to be given to tradition the great institutions of learning may be carried back to much earlier dates. although it does not appear that the term university was applied to them. According to some authorities the venerable Bede obtained the doctor's cuegree at Cambridge in the 8th century, and he degree of Master of Arts was confeired on St. John of Beverley, at Oxford, in the 7th century. Other historians connect the University of Bologna in Italy with a school established there, after the complete downfall of Paganism and the general adoption of Christianity. This school, founded by Theodosius II. in the 5 th century, was revived by Charlemagne in the 8th, and some centuries later was attended by many thousands of students from all parts of the civilizod world. Bologna is famed as being the oldest university in Europe where, in all probability, regular academic degrees were first instituted.

The Emperors and Popes of the Middle Ages gave to the universities the right of conferring degrees in their name. The degrecs so conferred became universal titles, giving to those to whom they were granted rights and privileges, and imposing upon them certain responsibilities. They constituted the connecting links between the scattered seats of learning in Europe; and graduates of universities enjoyed the advantage of being members of a great intellectual corporation with esiablishments in every civilized country.

We have to some extent the explanation why degrees were conferred in the name of the Pope as ruling authority. The Church was the mainspring of intellectual action, and, acting through the universities, penetrated the constitution of each community. There was thus throughout Christen-
dom, amidst all the national diversities and struggles for supremacy, a unity of learning diffused wherever the sway of the Church extended.

The form of admission to a full degree was from the commencement marked by great form and ceremony. In England the distinction has always been highly prized. At one time it was attended by scenes of feasting and rejoicing. Any one having attained the position of a graduate assumed a higher rank and status. In Germany the Doctor ranked before the untitled nobility, and next to the knights. The Doctor of Laws enjoyed the same privileges as knights and prelates. In Elizabeth's time the academir degree was given to a great nuunber of distinguished men. By special statute its attainment was rendered as easy as possible to the favoured and the nobility, and thenceforth 2 university education became a mark of a gentleman, and it has ever since remained an ornament and recommendation to the best society.

Throughout all the changes which have taien place in the world since the days to which I refer-through all the revolutions, the rise and fall of dynasties, the differences in matters of faith and the increase of general education-the academic degree has lost nothing in individual value. The stholar stamped with 2 university distinction continues to be held high in popular respect.

The university has been transplanted from Europe to America. It has taken root in the generous virgin soil on the northern shore of Lake Ontario. A few years ago the spol where we are now assembled differed from no other place in the primeval forest which clothed the face ol nature. First it was La Salle who built Fort Frontenac on the site of the Limestone City. From a collection of fur traders' huts around the Fort, it passed into a village, to a town, to
a centre of commerse with the marks of refinement which wealth can purchase, and with all the accessories our modern civilization demands. The buididings of this university have sprung into existence and stand out prominently in the architecture of the city. In this hall we perpetuate in a modified form the usages and ceremonies which, year by year for many centuries, have been pructised in the schoois of Europe-and to-morrow we will send to the world young men of Canada distinguished by the grad. uate's degree, to seal them as scholars according to ancient usage.

We still observe the ancient ceremony of matriculation, by which a youth becomes affiliated to the university. Having passed the prescribed examination and succeesfully matriculated, the student is privileged to wear the academic gown-a distinguishing mark given to us by medixeval Europe-and in itself representative of the philosophic robe in which the student of classicantiquity was clothed. At different stages of student life the dress has been diversified to denote the rank and scholastic states of the wearer. The title of Bachelor was introduced in the r3th century by Pope Gregory IV., to denote a student who had undergone hir first academical trial. At that period the Bachelur's title was not of the same value as it has since attained. It has always been the lowest step in university honours, but at first it simply implied an imperfect or incomplete graduate. The very term was held to be synonymous with scholar, and the distinction between a Bachelor and Master has been defined that "a Bachelor is a man who learns; a Master is a man who is learned."

The qualifications of a Bachelor's degree were subsequently raised. After the middle of the $13^{\text {th }}$ century it became a regular academic degree, and it has always been prerequisite to
the second or higher degree of Master or Doctor. On the distinction of Bachelor becoming exclusively a university degree, the formalities of the Master's degree were multiplied by way of giving it dignity and solemnity.

The degree of Master was granted to those who had satisfactorily com. pleted their university course and who were found capable of teaching others. A diploma or license to teach was given under express Iapal privileges as a testimonial or attribute of the academical dignity. The candidate at the same time received a hat as symbolic of his admission among the graduates, and from this circumstance no doubt has sprung the ceremony of "capping" the student, observed to the present day when degrees are conferred.

The titie of Doctor was held to be in no way superior to Master. How. ever the sound may differ they were nearly synonymous. The term Doctor signified a teacher, and the degrees of Master and Doctor were conferred in the first instances only on those who were qualified by study and training, and had naturally the power of communicating knowledge. The distinction was merely in the application of the terms. Those learned men who taught theology and philosophy were commonly designated Masters, while teachers of law and medicine were styled Doctors.

It was this system of which I have attempted to draw a faint outline that has given to universities the perpetual life which they have enjoyed. The training of men qualified to teach others, the conferring on such men the degrees of Master or Doctor as a guarantee of efficiency has indeed been the means by which the institutions of learning have reproduced themselves from generation to generation as the centuries rolled on.

Although all who received degrees
were considered qualified to act as public instructors, and those who ar. cepted the distinction were at one time hound when called upon to nerform the duties of tuition, the practice became general in course of time to select a certain number of Masters and Joctors remarkable by their powers and attainments to act as authorized teachers. Such as these have been designated Professors.

Academical degrees, originating as described for the purpuse mainly of securing competent teachers, afterwards became distinctions which were highly prized, and men competed for the dignity who had no wish or intention to teach.

The universities of the Middle Ages comprised four distinct ${ }^{\prime}$ Faculties -Arts, L,aw, Medicine, and Theology. The Facuity of Arts was held to be fundamental, and the Master's degree was insisted upon as a necessary preliminary condition for all who designed to take a place in any one of the o:her Faculties. Thus the Faculty of Arts formed the basis of academic instrurtions, and it was, in deed, the type and mouid in whirh all professional and technical educa. tion was set. The rule may not be rigidly enforced under the altered circumstances of to day. 'The necessities of life, the pressure of competitior:, the claıms of individual effort, all intervene to give a practica! form to technical education; but in the early history of high education the preliminary study of Arts was held to be indispensable; and it may be said that no one who has followed the same course in modern times has ever found that his labour has been given in vain. The typical university, with the four Faculties, has been compared to a stately edifice of which the ground floor-the very foundation and basis of all-was Arts. The walls being represented by Law and Medicine, while Divinity formed the roof
or superstructure which crowned the whole.

Such was the Universiog in past cen turies- such the system of degrecs. their antuplity, their origin, their value, their uses and some of the customs in conferring them. liut before the typical seat of learning be came known and recognized as a um. versity, and as such was established throughout Europe, in every land where civilization and religion pene trated, we have a record of schools of an analogous character. Schook at which thousands of scholars met and studied under teachers renowned for their learning and the doctrines ther taught. Throughout the wor'd's history there have ever been nat $\because s$ win had felt that life had higher alt is and possibilities than mere material success. In the gth century our own Alfred revived letters and gave a stimulus to the schools of Eingland. which the Danish invasion had almost extinguished. In the 8 th century Charlemagne established schools in which the course of instruction embraced all the learning of the age. In the 7 th and 6th centurie: the Irish monasterics serpassed all others in maintaining the traditions oi learning, and in the 5 th century schools were founded in Italy, which have been continued up to the present day.

Chronologically as well as geographically we are thus drawn nearer to associations connected with the golden days of Greece and Rome, and to the famous schools presided over by the old philosophers; those sages whose recorded wisdom enriches the literature of every age. The schools referred to foreshadow the university, and in some of them may at least be traced the germ of the academic degree.

The Athenæum of the Capitol, together with other establishments of learning throughout the Empire, were recognized as important elements in
the arrangements of the State. They refowed the highest patronage, !ireiesorrial shairs were founded by the fimperors, and they were perpetuated br pincely endowments. The prinuple was recognized that the future minatere of the State was bas:d on the education of the youth of the country.
If Kome had the Athenarum of the Caputel, (ireece gloried in the most perfect training schools at Athens. Those of Plato, Isocrates, and Aristotle appeared to discharge the functons of a university in giving to the most distinguisheid men of the time their mental traiaing. It is held by some wri" ors that even the external organization of the university dates from this period in the history of Athenian culture, and that the educational plan and discipline of these schools represent an early form of the modern Faculties.
If there were no academic dignities precisely similar to our modern degrees. bestowed at those schools of antiquity, we may be sure that tne students hailed with no little satisfaction the annonncement that they had passed the Trivium or Quadrivium ; and we know that in those days, as at present, it was an object of ambition to claim as their Alma Mater a school which had established the highest reputation for excellence.
Turning to Egypt, we find at a period when internal animosities and political discords were disturbing all other countries, when the other nations of the world were ravaged by war and were sinking from its effects, liarature and science were drawn to Alexindria, and a farnous school was foundec which kept alive the embers of knowledige and preserved mankind from relapsing into barbarısm. Alexandria, founded nearly three centuries before the Christian era, became the repository of all the learning of the civilized world. The library of the

Polemies, destroyed by Casar half a contury before Christ, was the finest in existence. It is said to have contained 700,000 volumes. This lit. rary was attached to a magnticent establishment for the cultuvation of learning, in which teachers and scholars were maintained at the king's expense. This establishment, known as the Muscum, had a subdivision into departments or schools, where the different branches of education were taught as in the Faculties of a modern university. The schools were Mathematics, Literature, Astronomy, and Medicine. Minor branches were classified under one of these general headings, and the schools were presided over by men of great distuc. tion. Euclid was at the head of the mathematical school, where his "Elements of (ieometry" were first studied -a work which has held its ground as 2 text-book for nearly twenty-two centurics. Pre-eminently the school of medicine achieved great renown, and the reputation of having passed as a student at the Alexandrian Museum was regarded as a sure passport to professional success. Late events have particularly directed the attention of the English-speaking family to this ancient seat of learning. A few months ago our thag was borne to Alexandria, and the British sailor directed the grandest engines of destruction ever produced by human skill to silence a people but a few degrees removed from barbarism. Such are the vicissitudes of time. When the people of the Eritish Islands were painted savages, and centuries before they ceased to be barbaric, warring tribes, the commerce and civilization of all nations converged at Alexandria. Alexandria was then the intellectual metropolis of the world, and it presented an example of a system of education from which it may be said the university of to-day has been modelled.

I have in a fev words dwelt on the antiquit; of the ecremony to which every undergraduate looks forward as the step which is indispensable to taking his place in life. Whatever form the conferring of degrees may have assumed, there cannot be a doubt that for upwards of two thousand years some certificate of attend. ance at a school or college, some mark of proficiency in learring, has been held in reverence. This university strives to follow the principle by which the degrees it grants may have value in the world's estimation. It nust be plain that for any honour to be attached to degrees the standard of education should be high and the distinctions should be awarded only to those whose diligence ahd attention have m.ade them worthy recipients of them. Queen's University presents an example of an institution of learning complete in the four Faculties, and in this respect it is almost singular in the Dominion in retaining in its teaching all that was held to be valuable in the Middle Ages, so far at least as the course can now be healthily followed. I have mentioned that the early universities obtained their authority from the civil or ecclesiastical sovereign in whose day the institution was founded. Our own unive sity enjoys its privileges and its rights, and exercises its powers, under the Royal Charter of Her precent Majesty, granted at the beginning of her long and happy reign.

In this as in all modern universities the degrees conferred are of two kinds. The first are scholastic diatinctions, denoting the grade of the student and the rank which he has reached in educational progress. Each degree is a guarantee and certificate of the attainments of the graduate. It attests that the university authorities have satisfied themselves that the holder has been a regular attendant at the lectures, and that in the
examinations periodically held he has been found competent to rerrive it These degrece are granted as a ght to which the qualifed student is justly entitled in recognition of his prifi ciency. The second order of degrees is conferred only on men who have disunguished themselves in literature or science, or who have become em. nent in professional life and have gained the world's gratitude. Such honorary degrees are granted without examination. They are based on the common'sme of the person to whom they are given, and they are esteemed according to the judgment and justuce exercised by the university by which they are accorded. Queen's has always been sparing of her honour. The number of honorary degrees at present held from this university are, Doctors of Law 12, and of Doctors of Divinity 24, while the total number who have graduated is over 800 .

As in modern universities which claim to have in view the higher education of youth, the Faculty of Arts with us retains its supremacy, and to some extent it is held to be the basis on which special knowledge must rest. I here approach a question on which opinion has long been divided. It has led to discussions between men of admitted learning and ability, of different views, and, it may be added, without in any way leading to una.r. mity oi opinion. It seems to me that these differences are not unnatural, and that they must for some time continue to exist, for they depend on the tone of mind and particular training of those whose attention is given to the subject. On a former occasion I have referred to this dissonance of opinion. I did so with extreme diffdence, and with similar hesitation I revert to the question, for it bears directly on the degrees in AitsBachelor and Master-which we are now considering.

The basis of the Facuily of Arts-
indecd, of the whole scheme of academic education - has long been the: language and literature of the ancient lirecks and Romans. No one questons th- necessity of these studies at 2 period some centuries back when there was no modern literature worthv of the name, and when a man, ignorant of the classic languages, had no key to the recorded wisdom of the world. In the Middle Ages Latin was the language of the Church, of l.3w, of Medicine, of Diplomacy, of Cours even to some extent, and a knowledge of it to any one entering any of these spheres of life was indispensable. But the times in which we live are no longer the same. Principles of government, $n \cdot w$ sciences, schools of thought, powers of movement and means of intercourse then undre:med of, comforts and conveniences at one time utterly unknown in palaces, are now found in some of the humblest homes. These and a thousand changes have, step by step, modified all the features of life and with them its necessities and requirements. The learned professions and their accessories have not remained stationary. Theological, medical, and legal works are no longer written and read only in Latin. The laws of our country have largely sprung from sources which it requires no classical erudition to penetrate. Other professions have grown up that are by no means classical, and yet they are not necessarily or in any case wholly unlearned. The modern languages have brought forth a most varied literature. There is much of little value, much which is ephemeral, but there are numberless works on every subject which will endure forever. Indeed, no one life can compass the standard volumes already written in our own tongue, and day by day valuable additions are made in every sphere of thought in science and literature.

Then as to the literature of anti-
quity. What is valuable as a record $f$ the $p ;=$ as history or philosophy, and what is pleasing and charming as the works of the imagination and ?ancy, can be read in translations. The E.nilish rendering should place the Finglish reader for all practical purposes in a level with the inssical scholar.

Is it, then, necersary ? and, if unnecessary, is it wise? in the case of every individual student to devote so much of the most impressionable and valuable years of his life to 2 gram matical study of two dead languages. It is stated, perhaps fairly and with reason, that translations do not disclose the full beauty of the original writings. It is urged that translations give no better idea than plaster casts afford of the ancient sculptures. Let us judge by this standard of comparison. Any one who has seen the renowned marbles in the richest collections of the world-in the great galleries of the Vatican, in the Ufficio of Florence, and the Musum of Naples; any one who gaze unon these priceless treasures of ancient art must confess to a feeing of regret and disappointment-disuppointment that the originals before his eyes are so little better than the casts with which he is familiar. The surface of the work is injured by the tooth of time-it is blurred and blotched; in some cases the sculptures are defaced and not unfrequently clumsily repaired. Hence it happens that the mind reverts to the carefully formed artistic casts by which we have learned to know and estimate the original, forming, as it would seem, too high an ideal. Who amongst us has seen those pure and stainless modern reproductions, faultess!y brought out with all the care and taste of patient genius, would say they are in point of real beauty in any way inferior to the originala. There are casts quite the opposite to those I describe sold by
itinerant vendors of cheap goods and to be tound in the shope of the image makers. The copies I speak of are the work of educated artiste.

Similarly with ancient literature. Is it not quite possible for a wellexecuted translation in reveal to the ordinary reader the obvious meaning of the original, and anset hefore him the auther's thoughts in much of their vigour and beauty? It is only the classical scholar of the highest attain. ments who can enter into the delicacies and fine peculiarities of the language in which the creations of antiquity are given. Such scholars
are exceptionally fow. These trans. lations must far surpass the rendering of the generality of students who have devoted years to the study. Is it not possible 10 find in the reproductions of these learned men a direct path to the learning, the poctry, and the history of the past?-a path which the many who can never distingush themseives in (ireck or latin may casily follow.

If this be possible, we must inquire for another reason why the l.atin and (ireek languages continue to hold a fundamental position in academic studies.
(To br confinurd.)

## RFLIGIOUS UNIVERSITY EDUCATION.

## AN AIIDRESS RY PKESIDF.NT NELLES AT THE ANNUAI. CONVOCATION OF

 VICTORIA UNIVERSITV.THERE are indications in this country and in the United States of an increasing interest in the great work of Christian education, especially of higher or university education. There is a natural alliance vetween Christianity and intellectual development, and, not-ithstanding some apparent exceptions, it may be truly said that the Church of Christ has done more than all other agencies combined for the progress of learning, the quickening of popular intelli. gence, and the wide diffusion of knowledge.

The great universities of the world have had a religious origio, and have been endowed and built up by Chris. tian beneficence. This holds good of America as well as of Europe. The history of American Colleges is interwoven in the closest manner with the history of the churches of that land. Of this fact we have very prominent
examples in Harvard and Yale, and Amherst, and Princeton, and Darrmouth, in the Wesleyan University, in Brown University, the University of Rochester, the University of Syracuse, Union College, and many other American colleges. The amount of property belonging to the denominational colleges of the great Republic was estimated a few years ago at sixtyeight millions of dollars, and some millions more have since been added, accurding to rne recent statement not less than twelve millions during the past year. These immense donations have led an able writer in the North American Review to say that the country has been visited by "an epidemic of liburality" in the matter of higher education. We should be glad to have this disease, like some other infections, find its way across the border. Indeed, there are already some marked traces of such a visitation. It
is gratifying to he able to made mentunn, and $i$ is only right and proper in make frequent and public men. tion of munificent gits like those of Mr. Mclaren to Knox Collepe, the Hon. W. McMaster to the Baptist College, Mr. Redpath to Mc(;ill, Mr. Munroc to Dalhousie, and the late Mr. and Mis. Jackson and Mr. Dennis Moore to Victoria College. It is sultable and in harmony with our feclings that we should here to day. and from this Convocation platform. congratulate these sister institutions on the benefactions thus receive', and the consequent increase of their eff. ciercy. (Yur material prosperity, our advancement in agriculture, manufactures, and commerce, should be accompanied by progress in all higher interests. The resources of the Dominion are being largely employed upon railways, immense and neverending railways, yet man does not live by railways alone, however long and expensive they may be, but be every word that proceedeth out of thy mouth of God, which includes especially the moral and intellectual development of the people, for the Divine word ihat tells us that "wisdom and knowledge shall be the stability of our tumes and strength of salvation." How can I sympathize with those who fear that we shall educate too much, that we shall be overstocked with scholars, and the literary and professional pursuits will draw our youth unduly away from agricultural and commercial occupations? Let farmers and merchants be also educated and as highly and wisely as possible. Distribution of employment will regulate itself according to the great law of supply and demand, and other natural conditions. All experience shows tnat while elementary education needs to be insisted on and made altnost compulsory, higher education requires to be encouraged to the utmost. Nor is there much occasion to fear that we shral
have too many colleges ; at any rate. I do not see that we have too many now, although this great Mcthodist Union, if it should come abnut, as I hope it will, may render it feasible and wise to merge into one two of those now in operation. The great educatiocal work of the Dominion in tire to come will not be centralization so much as diffusion, not merely the creation of a few eminent scholars, important and desirable as :hat may be, but the general enlightenment and elevation $c^{\prime}$ the community at large. And in an extensive country like Canada or the United States, this general enlightenmets will be best promoted, at least in the higher branches of learning, by a system of outlying seminaries and colleges scattered throughout the land, providing education for youth of both sexes, and diffusing and Christianising that education through the co-operation and direct instrumentality of the several Churches. In that manner we shall best carry the spirit of the Gospel into our literature and philosophy, with their various depart ments of reading for the instruction or amusement of the people, and we ahall at the same time impart to the popular religion something more of thoughtulness and intelligence than it would otherwise have. It is preposterous in our day to regard schools, especially elementary schools, without the element of religion, as sufficient to secure those two great objects, or indeed to secure in any sense that is worthy to be called the education of a free Christian people. The safety of the State as well as the progress of true religion imperatively demand an acquaintance with many higher branches of learning, and demand also the wide diffusion of that learning among those great niddle classes of society upon the morality and intclligence of which the public weal chiefly depends. When, therefore, Chritian Churches under-
take the founding and support of universities and higher seminaries, if they conduct such institutions in a broad and liberal spirit, they are doing one of the best things possible for the general good. Universities or calleges so created may be ill-endowed and feeble for a time, but they will not remain so. They will keep pace with the progress of the country, and as the American examples are beginning to show, they will at length outstrip both in wealth and influence those institutions which depend upon the support of the State alone. All the great universities of the world (as we have the high authority of Prof. Goldwin Smith for saying) have grown great through successive private benefactions.

So far as the Methodist Church is concerned, both here and in the United States, she has had one definite line of action from the beginning, which is to combine education with the preaching of the Gospel, and to maintain colleges for the training of youth under religious, but not sectarian, influence. It is a noteworthy fact that while several of the Methodist colleges of the United States already have endowments of about a million of dollars each, the last general Conference of the Methodist Episcopal Church decided to attempt yet greater things, and to enter upon an energetic movement through the whole Church in 1884 for a centenary fund, the chief portion of which is to be devoted to higher education. Our own general Conference of last September gave prolonged and earnest attention mainly to two subjects, the union of Methodism and higher education. The union is working on towards completion, and in forming a "Basis of Union," the large joint committee unanimously determined to adhere to the past educational policy of Methodism. At the last general Conference our educational society
was placed upon an improved footing, and steps were taken to arouse the whole Church to increased interes! and liberality. The plans of the conference have been energetically followed out by the general president and others, and thus far with most encouraging success. This educational society, having important relation to our universities and theological schools, has also, through those institutions, the most vital relation to the general progress and power of Methodism. It has vital relations to our Sunday schools, for these schools require teachers, periodicals, and libraries, in fact a great body of Ciristian literature and Christian workers. These various helps and appliances must be supplied very largely through the guidance and productive power of our higher seminaries of learaing. The educational society has, of course, vital relations to the pulpit, both in the ordinary and in the missionary work. It has important relations to the homes of our people, for their homes will take in a higher character when father and mother have been made to feel in their earlier days the benefit of Christian culture. We shculd not indulge in narrow, onesided views of the office and sphere of the Christian Church. The Church of Christ, in the future as in the past, must stand in the centre of all the great intellectual and social forces of the world; working upon the spirit of the age, working through the spirit of the age, wrought upon by the spirit of the age. She must leaven and modify all things secular, or be leavened and modified by them. Her histery thus far has generally been an example of both the one and the other. But the struggle for the mastery was never before what it is to-day. New and tremendous forces have come into piay. The power of the press, the free and rapid interchange of ideas over the whole earth, and some new theories in
science, a blind, bewildered sense of suffering among the poor, the power of strong combination among operatives against the real or supposed oppression of the capitalist ; these and other causes have brought upon us a state of things never before known. No mortal man can forecast the issue unless indeed it be by the prophetic eye of faith. These diabolical dynamite explosions are but 2 kind of symbol of vast volcanic forces which lie slumbering all abroad among the nations, and which some of the scientific speculations of the day are well adapted to arouse from their slumber. Agnosticism,Secularism,Communism, Materialism, Pessimism, Atheism; every one of these words is a sound of ill-omen, and every one has able theoretical expounders and eager fanatical disciples. He who lies in the hirder part of the ship asleep upon a pillow will doubtless control the storm and still the tumult of the people, but the duty of the Church is none the less imperative to consecrate all her resources, to employ her best instrumentalities, that she may keep herself always in the van of human progress, and still remain the light and hope of the world. It is her high and solemn vocation to rule the world's thought, to bind it in captivity to Christ, to harmonize all the truths and powers of the Gospel. Tu do this she must keep her thoughts moving, her own intellect in vigorous action. She cannot forever be chewing the cud of her old acquisitions. She must walk out into fresh fields and new pastures. To use the words of the Rev. W. Arthur, M.A., "she must not imagine that her forms and definitions have come down to her with the stamp of eternity upon them." She cannot stand still in the world of ideas. Nothing in God's universe does stand still, not even the great universe itself. Time, like a great policeman, is always going about the streets telling us to
move on. She has to be at once conservative and progressive, remoulding and rejuvenating society; remoulding and rejuvenating herself; putting under revision her imperfect formularies and expositions of religious truth. She is always putting the new wine of Christian thought into the new botthes of better ecclesiastical and theological systems. This she does to preserve the wine, and sometimes one is ready to wish that she could put some of the new wine into some of the old ecclesiastical bottles, not to preserve the wine, but to burst the bottles. There are parts of her great work which the Church cannot do by religious earnestness alone, but by earnestness combined with scholarship and skill. She needs, therefore, always to have within her ranks an adequate supply of highly cultivated men, men fully conversant with the latest teachings of science, the latest speculations in philosophy, the latest researches in Biblical criticism ; in fact the last word of all new learning. This means of perpetual maintsance and control of Christian schools and universities. Not poverty-stricken and feeble universities, but universities munificently endowed and thoroughly equipped. All our Canadian universities are as yet comparatively poor. They are doubtless doing good work, so far as they go, but they could do much more and make college life more attractive and useful if they had ampler means. Columbia Col lege, one of the oldest and richest in America, sent out a proclamation the other day that she was just now in need of the trifling sum of four millions of dollars! If we were to speak in that manner for Victoria, we should make our great Methodist Church open her eyes with wonderment, and in fact some opening of her eyes would do her no harm. For while she sees clearly the value of Christian missions and other evangelical enter-
prises, she has a very dim and imperfect apprehension of the worth of her universities and of their financial necessities. I am disposed to draw a line of compromise between our wants and our hopes, and to say just now that Victoria University needs at present about half a million of dollars, or some $\$ 30,000$ a year. This would be rather more than double what she has already. The University of Queen's College, as I learn from Principal Grant, has now an income of nearly $\$ 25,000$ per annum, the University College of Toronto an income of $\$ 70,000$, and her learned president has lately told the public that University College is too poor to have a chair of political economy, especially a chair strong enough to keep a just balance between Chancellor Blake and Sir John Macdonald. President McCosh, having added several millions of dollars to the property of Princeton College, now declares that institution to be "in? crisis" for
the lack of $\$ 200,000$ more, for the department of philosophy alone. So our friends will see how modest and almost humiliating is our call for some $\$ 15,000$ or $\$ 20,000$ additional income. It matters little from what source Victoria shall receive this proposed revenue of $\$ 30,000$, whether from the annual givings of the Church, or from a permanent endowment, or from the two combined. But this income she must and should have without delay ; and when she gets it she will repay the Church and the country a hundred times over in that which is more precious than goldmore precious than gold to the Church, more precicus than gold to the State-in a long succession of highly trained and scholarly Christian men, for

The riches of the Commonwealth
Are free, strong minds and hearts of health; And $\mathrm{m} r$ re to her than gold or grain The cuaning hand and cultured braio.

## A FEW WORDS ABOUT THE EIGHTEENTH CENTURY.

BY FREDERIC HARRISON.

(Continued from page 153.)

THERE is this stamp upon every stroke ofeighteenth-century work; the habit of regarding things as wholes, bearing on life as a whole. 'Their* thirst for knowledge is a practical, organic, working thing; their minds grasp a subject all round, to turn it to a useful end. The encyclopæjic spirit animates all: with a genius for clearness, comprehension, and arrangement. It was for the most part somewhat premature, often impatient, at times shallow, as was much of the work of Voltaire, Diderot, Johnson,

[^0]and Goldsmith. But the slightest word of such men has to my ear a human ring, a living voice that I recognize as familiar. It awakens me, and I am conscious of being face to face with an interpreter of humanity to men. When they write histories whole centuries glow with life; we see and we hear the mighty tramp of ages. In twelve moderate octavos, through all which not a sentence could belong to any other book, Gibbon has compressed the history of the world during more than a thousand years. Is there in all prose lit-
erature so perfect a book as this? In these days we write histories on far profounder methods; but for the story of ten ordinary years Mr. Freeman and Mr. Froude will require a thousand pages; and Macaulay's brilliant annals, we are told, needed more time to write than the events needed to happen.
I often take up my Buffon. They tell us now that Buffon hardly knew the elements of his subject, and lived in the palæozoic era of science. It may be, but I find in Buffon a commanding thought, the earth and its living races in orderly relation, and in the centre man with his touch of them and his contrast to them. What organic thought flows in every line of his majestic scheme! What suggestions in it, what an education it is in itself! And if Buffon is not a man of science, assuredly he is a philosopher. No doubt his ideas of fibres and cells were rudimentary, his embryology weak. and his histology rude ; but he had the root of the matter when he treated of animals as living organisms, and not simply as accumulations of microscopic particles. Now Buffon is a typical worker of the eighteenth century, at its high-water mark of industry, variety of range, human interest and organizing life.
We may take Adam Smith, Hume, Priestley, Franklin ; they are four of the best types of the century; with its keen hold on moral, social, and physical truth at once ; its genius for scientific and for social observation, its inexhaustible curiosity; and its continual sense that man stands face to face with Nature. They felt the grand dualism of all knowledge in a way that perhaps we fail to grasp it with our infinity of special information, and a certain hankering after spiritualities that we doubt, and infinitesimal analyses which cease to fructify. Adam Smith, the frrst (alas! perhaps the last) real economist, did
not devote his life to polishing up a theory of rent. Astronomy, society, education, government, morals, psychology, language, art, were in turns the subject of his study, and in all he was master ; they all moved him alike, as part of man's work on earth. He never would have founded political economy if he had merely been an economist. And all this is more true of Hume, with a range even wider, an insight keener, a judgment riper, a creative method even more original. And so, Priestley and Franklin: as keen about gases and electric flashes as about the good of the commonwealt.1 and the foundations of human belief. And when Turgot, himself one of the best of this band of social reformers, said of Franklin,-
Eripuit ceelo fulmen, sceptrumque tyrannis,
it is true, in a wide sense, of them all, and especially of Turgot himself. They all sought to conquer the earth, as the dwelling-place of a reformed society of men.

This encyclopædic, social spirit belongs to all alike. We recognize in all the zeal to make their knowledge fruitful, systematic, common to all, useful to man. Out of fashion as such a thing is to us, every sentence they utter bears its meaning on its face; every book, every voyage, every discovery, is hailed with eurcka through Europe ; the voyages of travellers, or the surgical operation for cataract, instantly affect history, morals, logic, and philosophy. They can not rest till every corner of the planet is explored, till the races of man are compared, and the products of the earth are stored in museums, classified in orders, grouped into kingdoms. Science and social life, nay, philosophy and morals, were strangely transformed when the limits and the form of man's earth were first exactly realized. Cook and Banks, Anson and Bougainville, reveal to Europe the
antipodes, and their human, brute and vegetable worlds; and every science and every art is alive with new ideas; history, philosophy, morals, and social economy, are lit up with new laws. We see the same thing to-day; but the sacred fire perhaps burns with a soberer flame; the wonder and the sympathy are a little dulled by use; and through the mountains of our materials the volcanic shock of a new truth is less distinctly felt.

The universal human interest of these men throbs in every page they write. Defoe is politician, romancer, theologian, economist, pamphleteer, and philosopher. Swift is all this, verse-maker, and many things beside. Voltaire is poet, historian, critic, moralist, letter-writer, polemist, arbiter in science, philosophy, and art in general; like Virgil's monster, with a hundred tongues and a hundred throats of brass. Diderot was a very encyclopædic Briareus. But the intense social aim comes out in all alike, however different in nature and taste. Cowper himself has it, as he sits beside his tea-urn, watches his hare and his spaniel, or apostrophizes his sofa. Fielding clothes it with flesh and blood, hot blood and solid flesh; it lights up the hackwork of Goldsmith, and sheds a fragrance forever through his lovely idyll of the vicar's home; Johnson in his armchair thunders it out as law to the club; Bentham tears up the old statute-book by pissionate appeals to the greatest happiness of the greatest number; Burns sang for it the songs which will live forever in English homes; Hogarth, the Fielding of the brush, paints it ; Garrick, the most versatile of actors, played it ; Mozart, the most sympathetic of all musicians, found its melody; Reynolds caught every smile on its cheek, and the light upon its eye ; and Hume, Adam Smith, Priestley, and Burke sounded some of its deepest notes.

Of all in this century, three men stand out, in three countries, as types of its vast range, of its organizing genius, of its hold on the reality behind the veil that we see: Kant in Germany, Diderot in France, Hurne in England. For us here, Hume is the dominant mind of the age ; with his consummate grasp of human life in all its moral, social, and physicai conditions; by his sense, goodfellow. ship, urbanity, and manliness. This was not the age of the lonely thinkers in their studies, as Kepler, Galileo, Descartes, had been. Nor was it the age of Bacon, Pascal, Hobbes, and Locke; when philosophy was shaken by political and religious fanaticism. It was not the age of the wonderful specialists of our own day, when mountains of observation defy all attempts at system. It was an age more like the revival of thought and learning-but with a notable difference. Its curiosity is as keen, its industry even greater; its mental force is abundant. But it is far less wild; its resources are under command; its genius is constructive; and its ruling spirit is social. It was the second and far greater revival-that new birth of time whereof the first line was led by Galileo, Harvey, Descartes, and Bacon; whereof the second line was led by Newton, Leib. nitz, Montesquieu, Hume, and Kant; whereof the third line will be led by those who are to come.

In the progress of Europe, especially in its mental progress, there is an incessant ebb and flow, a continual give and take. The intellectual lead passes from one to the other, qualified and modified by each great individual genius. In the sixteenth century it was Spain and Italy, in the seventeenth it was Holland and England, in the eighteenth it was France, and now perhaps it is Germany, which sets the tone, or fashion, in thought. For the first generation perhaps of the eighteenth century, England had the
lead which Shakespeare, Milton, Bacon, Hobbes, Locke, Harvey, Cromweli, and William, had given her in the century preceding. The contemporaries of Newton, Locke, Dryden, Pope, Swift, Defoe, and Addison, were a force in combination which the worshippers of Louis the Fourteenth did not immediately perceive, but which was above anything then extant in Europe. The revelation of this great intellectual strength in England was made by Montesquieu and Voltaire. Voltaire, if not exactly a thinker, was the greatest interpreter of ideas whom the world has ever seen; and became the greatest literary power in the whole history of letters. When in 1728 he took back to France his English experience and studies, he carried with him the sacred fire of freedom whereby the supremacy of thought began to pass to France. Within ten years that fire lit up some of the greatest beacons of the modern world. Voltaire wrote his " Essay on Manners" in 1740; Montesquieu's "Spirit of the Laws" appeared in 1748, and its influence was greater than any single work of Voltaire. The forty years, $1740 \cdot 1780$, were perhaps the most pregnant epoch in the history of human thought. It contained the works of Voltaire, Montesquieu, Diderot, D'Alembert, Vauvenargues, Buffon, Lavoisier, Rousseau, the Encyclopædists, Condorcet, and Turgot in France ; and in England, those of Fielding, Richardson, Sterne, Gibbon, Robertson, Hume, Adam Smith, Priestley, Johnson, Goldsmith, and Gray. During the last twenty years of the century France was absorbed in her tremendous revolution, and again the supremacy in literature passed away from her to give to Germany Kant, Hegel, Goethe, Schiller, Beethoven; to give to England Burke, Bentham, Cowper, Burns, Byron, Coleridge, Wordsworth, Shelley, and Scott. So sways the battle of
ideas from age to age and from shore to shore.

This is not the place to discuss the vast movement of the human mind which is loosely called the Revolution. As an Oxford wit used to say, " To sit in judgment on the Revolution is like asking if the fall of man were a justifiable proceeding." Our judgment on all this depends on the bent of our minds in theology, philosophy, and politics. One who holds on to his Rible chiefly for its damnatory resources has assured us that this was the Satanic age. If we look at its achievements, one is tempted to wish that our age were more often visited by that accomplished gentleman. The century completely transformed all that had previously been known as to heat, gases, metals, electricity, plants, animals, tissues, dis. eases, geography, geology, the races, products, and form of the earth, psychology, chronology, history, political and social and economic science. It would take a volume to enlarge on these. One can but give the names of those departinents of knowledge. Compare the anatomical resources of Dr. Radcliffe with those of Hunter, Bichat, and Dupuytren ; the chemical and physical notions of Boyle with those of Davy, Volta, and Galvani ; the physiology of Boerhaave with that of Lamarck ; compare the classiticatory notions of Ray with those of Buffon, Linnæus, and Cuvier; take the ideas on society of Hobbes or Harrington, and compare them with those of Hume, Adam Smith, Burke, and Bentham ; compare Gibbon's idea of history with that of Raleigh, Bacon, Milton. Compare the psychology of Kant with that of Descartes, or Locke; and we see that the century made a stride, not as we have done by enlarging the sciences, but in crea. ting them or turning their rudiments into mature organisms.

The weak side of the century was
certainly in beauty, in poetry, and the arts of form. It was essentially the age of prose: but still it was not prosaic. Its imaginative genius spoke in prose and not in verse. There is more poetry in "The Vicar of Wakefield" than in "The Deserted Village," in "Tum Jones" than in Pope's Iliad, and the death of Clarissa Harlowe is more like Siphocles than the death of Addison's Cato. The age did not do well in verse ; but if its verse tended to prose, its prose ever tended to rise into poetry. We want some word (Mr. Matthew Arnold will not let us use the word poetry) to express the imaginative power at work in prose, saturating it with the fragrance of proportion and form, shedding over the whole that indefinable charm of subtle suggestion, which belongs to rare thoughts clothed in perfect words. For my part I find "the vision and the faculty divine" in the inexhaustible vivacity of "Tom Jones," in the mysterious realism of "Robinson Crusoe," in the terrible tension of Clarissa's tragedy, in the idyllic grace of the vicar's home. This imaginative force has never since been reached in prose save by Walter Scott himself, and not even by him in such inimitable witchery of words. If it be not poetry, it is quite unlike the prose that we read or write today.

Besides, one cannot allow that there is no poetry in the century. Let us give a liberal meaning to poetry; and where we find creative fancy, charm of phrase, the vivid tone of a distinct voice that we could recognize in a thousand-there, we are sure, is the post. For my part, I go so far as to admit that to be poetry which is quite intelligible, even if it have no subtlety, mystery, or inner meaning at all. Much as I prefer Shelley, I will not deny that Pope is a poet. Tennyson perhaps would never have run so near commonplace as to do stanzas
here and there in the famous "Elegy." but does any onc doubt that Ciray's "Elegy" is poetry? And though Wordsworth is a greater man than Cowper, it is possible, had there never been a "Task," that there might never have been an "Excursion." The poetry of the century is below our lofty English average, but it is not contemptible ; and when it is good it has some rare qualities indeed.

In the poetry of the century are three distinct types: first, that of Pope ; next, that of which the "Elegy" is the masterpiece ; lastly, the songs of Burns. Now the first belongs to the age of Louis XIV. The second is the typical poetry of the century. The third is but the clarion that heralds the revolutionary outburst which gave us Byron, Shelley, Scott, Coleridge, Wordsworth, Goethe, and Schiller. Cowper in part belongs to the three types: he is the connecting link between them all; touching Pope by his easy mastery of rhyme, akin to Gray by his exquisite culture and grace, foretelling Wordsworth and Shelley by his moral and social earnestness. If the century produced little true poetry, it produced some little that is very good, and a good deal which has some very fine qualities. "The Rape of the Lock" is a poem in a class by itself, and Pope wrote other pieces of magical skill and verve. Goldsmith's poems would please us more if he had not bettered them himself in his own prose. Burns wrote the most ringing songs in our literature. Cowper is a true poet of a very rare type, one of the most important in the development of Eng. lish poetry. And Gray's "Elegy" is better known and more widely loved than any single poem in our language. All this should be enough to save the age of prose from the charge of being prosaic.

In the best poetry of the century (at least after Pope's death) there is a
new power, a new poetic field, a new source of poetry. The new source of ; Netry is the people; its new ficld is the home : the new power within it is io serve the cause of humanity. It told the short and simple annals of the poor. It is a field unknown to Chaucer, Spenser, Shakespeare, Milton. Dryden, or Pope. But Goldsmuth has it in his heart of hearts; such men as Thomson and Collins and Beattie and Crabbe have it, though they remain on the lower ranges at their best ; Burns is the very prophet of it ; and it glows in a gentle hermit-like way in every murmur of Cowper's tender soul. "The Task" is by reason of this one of the landmarks of our literature, though its own nobler progeny may have lessened its charm to us. It is because the original charm is still as fresh as ever, that we may call the "Elegy in a Country Churchyard" the central poem of the age. Our young wordmongers and unutterables will tell us to-day that its moralizing is as obvious as a tombstone, that its melody is rudimentary, and its epithets almost trivial. Yes! and for that reason it has sunk into the souls of all who speak the English tongue ; it has created the new poetry of the cottage ; its very surrender of brilliancy, subtlety, or novelty, is its strength. The sustained undertone of pathos, the magical unity of its thought and its colouring, the simple humanity of it, all these make the "Elegy" the poem of the eighteenth century, the voice of the human age at its best.
Poetry is the central art ; but it is not all art : and the art of the century deserves a word. We may give up architecture at once. People were so much absorbed in making their homes comfortable within, that they seemed blind to ugliness eleswhere ; and if Mr. Ruskin is certain that Satan had to do with the churches of the Georgian era, there is no means of disprov-
ing it. But Reynolds remains the greatest English painter; Gainsborough and Romney have not been surpassed in their own line; Hogarth remains still our greatest humourist with the pencil ; Garrick is still our greatest actor ; Flaxman is still our greatest scilptor ; and it is well to remember that Turner was of the Royal Academy before the century was out. But besides all these, Crome, Stothard, Blake, Bewick, Chippendale, Wedgwood, and Bartolozzi worked in the century-and in their given lines these men have never been surpassed.

There is another art which lies closer to civilization than any art but poetry. Music is a better test of the moral culture of an age than its painting, or its sculpture, or even its architecture. Music, by its nature, is ubiquitous, as much almost as poetry ititself, in one sense more so, for its vernacular tongue is common to mankind. Music in its nature is social, it can enter every home, it is not the privilege of the rich; and thus it belongs to the social and domestic life of a people, as painting and sculpture, the arts of the few, never have done or can do. It touches the heart and the character as the arts of form have never sought to do, at least in the modern world. When we test the civilization of an ase by its art, we should look to its music next to its poetry, and sometimes even more than to its poetry. Critics who talk about the debasement of the age when churchwardens built those mongrel temples must assuredly be deaf. Those churchwardens and the rest of the congregation wept as they listened to Handel and Mozart. One wearies of hearing how grand and precious a time is ours, now that we can draw a cornflower right.

Music is the art of the eighteenth century, the art wherein it stands supreme in the ages; perfect, complete, and eelf-created. The whole gamut of
music (except the plain song, part song, dance, and mass) is the creation of the eigiteenth century ; opera, sonata, concerto, symphony, oratorio ; and the full uses of instrumentation, harmony, air, chorus, march, and fugue, all belong to that age. If one thinks of the pathos of those great songs, of the majesty of those full choirs, of the inexhaustible melody of their operas, and all inat Bach, Handel, Haydn, Mozart, (iluck, and the early years of Beethoven gava us, it is strange to hear that that age was dead to art. Neither the age which gave us the Madonnas and the Sistine, or the age which gave us Reims and Westminster Abbey, nor even the age which gave us the Parthenon, did more for humanity than the age to which we owe the oratorios, and the operas, the sonatas, symphonies. and masses of the great age of music.

Not merely was music of the highest order produced, not merely did that age create almost all the great orders of music, but the generation gave itself to music with a passion such as marks all ages wherein art reaches its zenith. When Handel and Buononcini, Gluck and Piccinni, Farinelli and Caffarelli, divided the town, it was not with the languid partisanship which amuses our leisure, but with the passions of the Red and Green factions in the Circus of Byzantium. England, it is true, had few musicians of its own ; hut Handel is for practical purposes an Euglish musician, and the great Italian singers and the great German masters were never more truly at home than when surrounded by English admirers. Our people bore their fair share in this new birth of art, especially if our national anthem was really the product of this age. And not our people only, but the men of culture, of rank, of power, and the court itself. And the story that the king caused the whole house to rise when the "Halle-
lujah Chorus" was heard is a happy symbol of the enthusiasm of the time.

Their music showed that theli hearts were in the right place ; but they showed it in more practical ways The age, with all its grossness, laid the seeds of those social reforms, whict it is the boast of our time to have matured. It was then that the greatest part of the hospitals as we know them were founded; the asylums, reformatories, infirmaries, benefit societies, Sunday schools, and the like. It was then, amidst a sea of misery and cruelty, that Howard began what Burke called "his circumnavigation of charity." Then too began that holy war against slavery and the slave-trade, against barbarous pun. ishments, foul prisons, against the abuses of justice, the war with ignorance, druakenness, and vice. Captain Coram, and Jonas Hanway, and John Howard, and Thomas Raikes, led the way for those social efforts which have taken such proportions. Jeremy Bentham and Samuel Romilly struck at the abuses of law ; Clarkson and Wilberforce and the anti-slavery reformers at slavery and the trade in men. Methodism, or rather religious earnestness, lies at the heart of the eighteenth century; and the work of Wesley and Whitefield is as much a part of its life, as the work of Johnson or Hume or Watt. That great revival of spiritual energy in the midst of a sceptical and jovial socicty was no accident, nor was it merely the impulse of two great souls. It is the same humanity which breathes through the scepticism of Hume, and the humour of Fielding; and it rups like a silver thread through the whole fabric of that epoch. Cowper is its poet, Wilberforce was its orator, Whitefield was its preacher, Wesley was its legislator, and Priestley himself the philosopher whom it cast forth. Thic abolition of slavery, a re-
ligious respect for the most miserable of huran beings as a human soul, is its great work in the world. This was the central result of the eighteenth century ; nor can any century in his. tory show a nobler. The new gospel of duty to our neighbour, was of the very essence of that age. The French Revolution itself is but the social form of the same spirit. He who misses this will never understand the eighteenth century. It means Howard and Clarkson just as much as it means Fielding and Gibbon; it means Wesicy and Whitefield quite as much as it means Hume or Watt. And they who :itll see how to reconcile Berkeley with Fielding, Wesley nith Hume, and Watt with Cowper, so that all may be brought home to the fold of humanity at last, will $n$ nt only interpret aright the eighteenth century, but they will anticipate the task of the twentieth.

A few words about the eighteenth century affiord no space to touch on the greatest event of it-the Revolutionary crisis itself. The intellectual preparation for it $i$ all that we can here note ; and we may hear the rum-
blings of the great earthquake in every page of Hume, Adam 'imith, Priestley, and Bentham ; nay, in Cowper and Burns and Wordsworth and Coleridge. "The Rights of :Ian," the "Declaration of Independence," "The Negro's Complaint," "the greatest happiness of the greatest number," "A man's a man for a' that," the "new birth" of the Methodists, were all phases of one movement to attain the full conditions of humanity. The Revolution did not happen in 1789 nor in 1793 . The Terror was in '93; the old system collapsed in '89. But the Revolution is continuing still, violent in France, deep and quiet in England. No one of its problems is completely solved; no one of them is removed from solution; no one of its creations has complete possession of the rield. The reconstruction, begun more than a hundred years ago, is at work still. For they see history upside down who look at the Revolution as a conflagration instead of a reconstruction; or who find in the eighteenth century a suicide, instead of finding a birth.Nineteenth Century.

## SCHOOLMASTERS AND THEIR OFFICE.

BY A. T. S.

(Continued from page 108.)

0NE of our objects in this article is to give such hints as may tend to raise the character of the instructor, and with it the repute of his profession.

Separating from the master his occasionally clerical character, what nieans has he, then, of raising himself in public esteem? We see only two -his learning and his tone of feeling and manners. These appertain to
him, lie naturally in his path, and in these directions, if in any, society expects to find his excellence, notwithstanding his peculiar difficulties; theoretically, indeed, a perfection in self-culture and self-discipline may be dtmanded in one who assumes the culture and discipline of others as his life's office.

And first, for "learning." In any high sense of the term it is rare in
schoolmasters; many never seck it, but are content with their old school and college stock; and many who do feel that they have no extra time, nor courage, nor energy to make or find time, and so the accomplished college scholar is too often ever tending to 2 skilful drudge in special subjects. But this is not all the learning wanted. It is not enough for a man to set his own au fait against his pupil's incipient awkwardness, his own rapid against his scholar's slow solution of problems, his own thorough knowledge of the prescribed "school-book" against his pupil's gradual acquisition of its contents. Boys soon see through this sort of thing nowadays, and cease to respect it. They quickly discover the difference between a schqolmaster who has ideas and one who only skilfully

> " can temper

His long and shorts with que and semper;"
and they view the latter as a great, clever schoolboy of whose capacities they have the measure. In order thoroughly to respect a muster, boys must feel that he dwells in an altogether higher region of knowledge, as Arnold did, and that he occasionally throws to them handfuls of wealth from unknown treasuries; and, further than this, the master should know that a sham, pompous, and superficial display is almost sure to be found out by an intelligent form. We have said that schoolmasters are not generally in the highest sense a learned class. Let us take one branch onlythat of English classical literatureand bring, not the respectable private schoolmaster of a country town, but some of our "high men," to the test. They have, every now and then, a demand made upon their knowledge when speeches are selected for public days. Can anything be much more miserable than the result? With the whole wealth of England's literature
in their libraries, they seem incap:..te of varying their programme; we have the same eternal round of well-known bits, varied, if at all, by some pierc in vogue from the gilt volume of a poet in fashion lying on the drawing-romm table. Supposing a man has taste and power for anything like wide and general study, how is he to find the time? We answer, it is certain that some few men do find it, and make good use of it. We may fairly suppose a master generally to be sutfciently independent to be in some measure the regulator of the time which he conscientiously gives to the work of actual instruction. The private schoolmaster is, at any rate, his own law in the matter, and the public one is not, as a general rule, by any means overtasked. If parents wish to seize upon his every available moment, and to fors. 1 im to be an untiring drudge, and nc thing else, he ought to know that his real influence with his scholars depends upon his being something more, and to resist all such short-sighted, selfish, and inconsiderate demands. Out of nine hours a-day: a man wil' be doing more ultimate good to hirnself and his pupils by giving to his )wn cultivation two or three of the hours than by sacrificing the whole nine to positive teaching, especially to texching, what is now a common demi nd, little more than the ''ments of who shall say how many multifarions iubjects.

A man's general superiority soon becomes known beyond the walls of his schooi-room; his pupils remember and respect it in after-life, and will often appeal to his taste or his judg. ment when they have a difficulty-an honour which they would never think of paying to the mere ordinary, apt schoolmaster. If thoroughly cultivated schoolmasters were common, we should soon see the profession rising in esteem; and we have only here to add that what militates greatly against
this perpetual self-culture of the instructor is his self.satisfaction at his perpetual triumphs over subordinate wills and immature intellects-a selfallisfaction only scorned, on such grounds, by superior men. The next matter well worth a man's thought and care, if he wishes to conciliate true respect, is the tone of feeling to be cultivated in his boys, and, therefire, primarily in himself; and the manners-by which we do not mean merely the "nice conduct" of a silver furk, or those "modes of genteel socicty," as it is called, which 2 clever monkey might sooa be instructed to imitate. Indeed thr day is pretty nearly, though not quite, over when, if a man known to be a schoolmaster is announced, people look for the entrance of something peculiarly angular and dogmatic, and are rather surprised than otherwise if they find him to be, on the whole, upon trial, rather a pleasant and unaffected gentleman. Ordinary and external good manners we may suppose he possesses, but what we aspire to for him is something more. Certainly, a boy-ambitious as the English are, above all things, of the character and bearing of gentlemen-ought not to feel that he goes to school for knowledge, but returns home for manners and civilization. The schoolmaster ought to be the equal, and, if he can possibly make himself so, the superior, of the parent in this latter point also. In " fashion," he may not be; but he ought to show to his pupils, by his own example, that feeling is higher than mode, as the gold is higher than the graving or setting, and that fashion, without feeling or with low feeling, is but base coin, whosever head or stamp it bears; and we may be pardoned for saying that it is just in this direction that a schoolmaster has, in England, a fair and wide scope, especially if he have himself a naturally good and generous disposition; and herein he
should be dominated over by no sectional prejudices, and submit to no class dictation; he should aim at giving that $\tilde{n}=$ neral moral greatness which, if anything. can cover the differences of cliques, shades, and grades, penetrate into the depths of character, and give a nobility of sentiment by no means necessarily the fruit of a long course in the schools of the aristocracy.

Out of a dozen schoolmasters skilful in teaching as an art, of fairly cultivated manners, of blameless industry in inculcating the dogmas of our religion, teaching science and language with tact and zeal, do we find one who cultivates with equal care the higher and more ennobling qualities of the heart-extensive sympathy, wide comprehension, largeness, grandeur, and generosity of moral views; a schoolmaster, in fine, to whom his pupils naturally revert in after-life as their highest moral type, model, and example? There is no foot-rule to measure these; there is no feeing them ; they are above all statute payment ; they are not "branches," but con amore gifts oct: of the fulness of a man's heart to those who come within his influence; glorious prejudices which have a tendency to spread and infect the young like a passion. For youth has a wonderful sympathy fo: what is strongly felt. We have no room to enter into the various effects of a high tone of feeling thus inspiring 2 school. Let us take a single school curse which it would tend to mitigate -that proud, painful, ungenerous questioning about parentage which has been the torture of many a boy of high feeling, but humble origin, at our English schools-one out of a hundred modes of displaying meanness and narrowness of heart. Had we more men of this moral elevation in our schools, from the highest to the lowest, who shall say that it would not tend infinitely to increase the respect felt for the profession at large ?

Fivery man. we know, has his own modes of influence, and a man of drier character would fail if he aped the enthusiasm of an Arnold ; but cach, in his way, should aim more than our masters now do at the education of sentiment.

It was remarked at the commencement that the standard of the schoolmaster, and with it, naturally, his estimation has been already raised. This is owing far less to vague talk and interest in society respecting education than to two or three positive movements. The first of these movements, in the case of the middle classes, was the institution of the proprietary school, by which a large portion of the educa:ion of the country was thrown into the hands of men themselves liberally educated, appointed according to the value of testimonials, generally of 2 highly respectable character. The gentry of many neighbourhoods were tired of being imposed upon by school speculators of whose attainments they had no guarantee ; many of these parents, too, may have smarted at the recollection of having in their youth been entrusted to impostors, and were so determined to secure something better for their children. The idea might almost seem to have been taken from the younger Pliny, who, in one of his letters, speaks of a searct made by the Roman patricians io his neighbourhood, for some good schoolmaster whom they might establish in common for the instruction of thei: boys. The offer of a liberal salary brought, of cuerse, many competitors, and good men were generally chosen. Some of these schools have thoroughly succeeded; some have swelled into colleges. In nearly all there have been occasional disputes-in some, ruinous ones-between the gentlemer proprietors and the masters who would not submit to interference and dictation. Still, unquestionably, the
movement, on the whole, has been a most advantagcous one, and manr a man, mercantile or professicnal, num in middle life, owes to it an education ten times better than his 'ather had a charce of receiving.

The next pistical movement in advance has been the establishment of the "middle class" and "rom. petitive examinations." We can sas of the former with certainty, as to one, at least, of their original suggestions, that they were got up in no mere dileftante or fidgety spirit, but from 2 felt necessity, and with a full cunsciousness that many difficulties might occur in the execution of the plan. University examiners were worried, and the extent of school impostures shown by the miserable specimens presenting themselves for examination, of whom, even at the first examination, two out of eight, on a daily average, at least, were plucked at Oxford and two more were often fairly pluckable. Nearly fresh from school as they were. nothing could account for this but permitted idleness or villanously bad instruction. Besides these, there was a numerous class to be accounted for of well-disposed young men, who, feeling themselves too weakly prepared for fair rivalry, dawdied through college in some unaccountable way, equally without dissipation and without distinction. Now, when men were imprudently sent to college in this state by schoolmasters who would be ready, if challenged, to lay the whole blame on university idleness, it was fairly argued that boys must be still more miserably neglected who were destined to be turned out into life without any public trial at all. It was for the protection of parents, then, that these trials were suggested, with certain conditions, more or less perfectly carried out, for the further protection of the schoolmaster as well. such as the following :--That no boy should be exposed to any middle-
inss examination under the age of fitteen; that the examination should be one without respect to special grammars or formulx; that no master should be in any way responsible for a boy who had been under his care for less than threc years; and that a boy should only be examined on subjects in which his master had professedly prepared him ; that the names, not of the boys necessarily, but of the shools, should be published in case of disgraceful failure, the tendency of this last being to force a master, in self-defence, to refuse to have his authority tampered with by the indulgence of parents, to put a stop to extra irregular holidays, and the unreasonable demands of a vast number of multifarious subjects; and last, not least, to prevent masters from putting forth their whole strength on certain show-cards and pattern-boys, to the utter neglect of the less promising-a system common in large schools in Fingland, and complained of by Jules Janin, in France, who says of his own schoolmaster that, after inspecting him and trying his paces, he put him on a
kind of bench of outcasts, to be more or less neglected-" comme nuliement digne de ses projets ni de ses leçons" -a process which takes place, prac. tically, at many an overgrown school of high name among ourselves. Ilefects there may be in the working of these examinations, but there can be no doubt that they will tend to act as checks on a vast amou.st of folly in parents, and want of conscientiousness in masters: the credit and subsistence of the masters will be publicly at stake, and they will not be inclined to sacrifire these to satisfy the whims of parents, who wish to combine improvement with indulgence, and to get education without discipline. Then there are the "compettive examinations," at which we can only give a brief glance. To some of the papers of examination for the far loftier Indian.ppointments we should feel very much inclined to prefix a sentence of Locke's Essay: "Nobody ought to be expected to know everything;" but "les reformes se relâchent toujours," and this kind of evil will probably cure itself.

## TOPICAI. TEACHING.

## BY LOTTIE L. VOIGT, BRIDGEWATER, MASS.

"This is the houre that Jack built.
This is the malt that lay in the house that Jack built.
This is the rat that ate the malt that lay in the house that Jack built.
This is the cat that caught the rat that ate the malt that lay in the house that Jack built.
This is the dog that worried the cat that caught the rat that ate the malt that lay in the house that Jack built."

$\mathrm{A}^{\mathrm{s}}$surely as the delicate tracery found in the hard rock, far below the surface of the earth, indicates the existence long ago of the fern, whose graceful outline is now all that
remains, so surely do these lines bear record of their origin; and that origin was topical teaching. Every element is here. Observe,-This is the house that Jack built. It is very evident from the way in which the lacts are stated, that Jack was already a wellknown personage. The teaching begins with, and takes for a foundation, that which is already known.

Procceding,-The first new idea introduced is the house, and here, at the very outset, the thing itself is presented to the mind. Not, "Once upon a time there was a house that

Jack built," after the manner of the old story-tellers; not a picture of the house, nor a plan of it, nor yet a long description; but, "Tht:, is the house that Jack built." Here it is ; look at it; observe it; go all over it from garret to cellar. "This is the malt that lay in the house that Jack built." Here, again, the "This is"; and we acquire this idea by precisely the same method as was used before;-by examining, studying the thing itself.
So we go on, step by step; individually and severally the rat, the cat, the dog come under our observation, till we reach the ultimate object of our study in this direction, and triumphantly announce, "This is the cow with a crumpled horn $t$ at tossed the dog that worried the cat that caught the rat that ate the malt that lay in the house that Jack built." And to any doubter who questions the important bearing of this knowledge on some science of the olden time I would reply, in the words of the oracular Jack Bunsby, "Whereby, why not? If so, what odds? Can any man say otherwise? No. Avast, then!"

Up to this point we have been placing ourselves in the attitude of the scholar; have followed his train of thought, and observed the working of his mind. Let us now station ourselves by the side of the teacher, and view the thing from his standpoint. The scholar has simply to concentrate his energies on the objects that are presented to his mind, one by one, and by so doing he has at last, as we have seen, distinct and connected ideas, not only of the individual objects, but also of their connection with, and relation to, each other; but the teacher's work is far more comprehensive. He has to know the things themselves, in their relation and order of dependence, and also to arrange the work so that they shall be brought teefore his pupils in their
natural order. He has, perchance. to tramp through meadow and marsh, through trake and brier for his delinquent bovine ; and to brave all sorts of dangers before he has his procession of the cow, the dog, the cat, the rat. the malt, and the house (with Jack in the background), marshalled ready to present to his class. For let me tell you, this obtaining and preparing of illustrations is no small item in the teacher's work.

Suppose the teacher, omitting all the careful preparation, comes down on his defenceless pupils like a thunderboit with, "This is the cow with a crumpled horn that tossed the dog that worried the cat that caught the rat that ate the malt that lay in the house that Jack built." And teichers often do expect pupils to learn statements fully as complex as this, with the additional difficulty, that the terms used and the thoughts expressed are more abstract and puzzling to the pupil than those in the illustration I have taken. What wonder, then, that the unfortunate scholars are simply paralyzed by the avalanche of words, for to them they will be, can be, nothing but words! What wonder that, not knowing where to begin nor what to do, they oftentimes do nothing at all. They may have a confused idea that the lesson has something to do with a cow, and a rat and a dog, and malt (and the chances are two to one that they will not have the faintest glimmering of light on the malt matter); but, as to their carrying away any definite ideas, that is utterly out of the question.

There is a mistaken idea prevalent among those who have not studied the matter, as to the meaning of the word topics. They say, "They may do very well for some grades of schools, but in the primary schools you cannot use them." Why not? Topics are simpiy distinct subjects of thought. Surely the teacher may give
the child his lesson in distinct subjects of thought. The child no more needs to know the system and method by which his mind is built up and developed than he needs to know the chemical and cohesive forces acting in the food by which his body is nourished. But it is important that in the primary school, of all places, the habits of thinking, feeling, and acting that are forming, and that are to be the basis of the future character, should be right habits.
Although the tendency of all tearhing at the present day is in the direction of this method in substance, if not in name, yet the fact remains that there are some, and not a few, who fractically condemn topical teaching. They usually belong to one of three classes : First, those who have tried to teach topically and have failed. Second, those who haven't t:me to teach from topics. Third, those who think it is too much work, and doesn't pay for the trouble.
What grounds have those who have tried and failed for their objections? "Good ground," they say ; "we know whereof we affirm. The system has been 'tried in the balances and found wanting.'" That is their testimony, honestly given ; and why? Imagine such a teacher, fresh from the precincts of Normal School, fully persuaded that topics are to be the basis of her teaching. She has topic-books,-yes, indeed,--topic-books by the dozen; and the affection of the average normal pupil for his topic-books none but a normal pupil can comprehend, not even those who have heard some despairing mortal mournfully exclaim, "Everything I knew was in that topicbook, and now I've lost it!" The teacher begins her work. The priceless topics that beguiled many an hour of solitude for her must surely be just what the children need; so they are introduced into her school, zorbatim et litiratim, without regard to
the age and intellectual capacity of her pupils. Of course her way of teaching is a failure, not through any fault in the theory, which she attempts to follow out, but through her own inability to adapt the topics to the needs of those particular scholars.

Then, too, there is another error into which the teacher may fall. It is possible for scholars to learn topics just as they would any statement given them in the text-book. That they can recite topics and whole outlines, and give definitions and statements glibly, proves nothing beyond the fact that they can learn words as easily in one place as in another,-from the board, or the slate, or the book, written or printed,-it makes no difference. These things the teacher must do if she would be successful. First, make sure that the topics are thoroughly understood; afterward, by questioning, by applications, by requiring it in every possible form, fux the thought, as well as its expression, firmly in the mind.

But what of those whose plea is lack of time; who have so many scholars, so many classes, that they cannot use topics, although they would like to? Their very excuse is the strongest argument that could be adduced in favour of topical teaching. If there are so many classes that the teacher cannot find time to teach in the right way, obviously the first thing to be done is to reduce the numier of classes. The school can be most easily regraded by arranging the work in outline, and giving lessons in distinct subjects, rather than in pages of the book. This topical teaching prepares the way for itself ; and since it is often impossible, on account of the number or varying ages of the pupils, for the teacher to reduce the classes, so that he can have all the time that he feels he needs for each recitation, there is the more need of having every lesson arranged beforehand, that none of the little time he has be wasted.

The same reasoning applies to the class whose excuse is, "I have just so much to accomplish in the time the class is in my charge. The teachers from whom they have come teach from the book; the teachers who come after me use the book. I have barely time to get them started in the right way; and in the examinations at the end of the year they will be behindhand." Try it, and see. If there is a right way to teach, and you know that way, no matter when or where, nor for how short a time you teach, teach in the right way.

There remains yet another class of teachers,-those who say, "It is so much work ; this way of teaching puts all the work upon the teacher, and leaves the scholar nothing to do." They maintain that since the use of topics does away with books altogether, the teacher's time is taken up with devising ways and means to keep the pupils busy.

To begin with, topics, so far from supplementing books, teach the pupil how to use books, so as to derive the greatest benefit from them. Then, as to the teacher's work in finding employment for his pupils, even if he uses the books wholly, lessons that would keep the child busy all through the school-hours would be much more than he is capable of taking in at one time. The usual way, with such toneaing, is to assign him a lesson of moderate length, which he will learn
(if he learns it at all) in a very short time, and then he can, and will give his undivided attention to mischief if he is a "bad little boy," or sit disconsolately idle if he is a "good little boy." Other employment must be provided for them with either system; so that objection falls to the ground.

The real reason for their being so "backward in coming forward" in the work is laziness. Was there ever a good teacher who did not work, and work hard? In the very nature of things this must be so. In every age the degree of lasting success attained in any undertaking is measured by the earnest, honest, hard work put into it. Why not in schocl-work as well as elsewhere? The teacher, who, seeing and acknowledging the right way, will deliberately sit down and say, " It is too much work, it does not pay to do it;" who is content to be a mere machine, without one atom of originality or one spark of enthusiasm; who is willing to hear her scholars drone on day after day, mere empty, meaningless words, feeling all the time that they are but words, making no effort to interest or to instruct, is unworthy the name of teacher.

And now, what can we do to prove that the system of topical teaching is what we claim for it? There is one way,-only one: "Do men gather grapes of thorns, or figs of thistles? Wherefore by their fruits we shall know them."

A NEw method for squaring numbers, invented by Mr. Boas, of the freshman class at Williams College, is thus described:Beginning at the left, multiply the double of each digit of the given number by the number represented by the preceding digits, and write each product under those already obtained, in such a way that its right-hand Ggure shall be two places to the right of the right-hand figure of the preceding product.

Then square each digit successively, beginning at the right, and place the right-hand figare of the first result one place to the right of the right-hand figure of the last product before obtained, and the right-hand figure of each succeeding square two places to the left of the right-hand figure of the preceding square. Add the columns together, and the result will be the required square.

## A BOY'S BOOKS THEN AND NOW.-XII.

BY HENRY SCADDING, D.D., TORONTO.

(Continued from page 168.)
(Dictionaries), (3) English: (b) "Minsheu."

HERE is "Minsheu," a work often named, but seldom seen. It is a folio with an elaborate title, first in Latin and then in English. Inasmuch as it not only defines the English words, but gives their equivalents in other languages, its general heading is "Ductor in Linguas." The English version runs as follows :-"The Guide unto the Tongues, with their Agreement and Consent one with another, as also their Etymologies, that is, the Reasons and Derivations of all or the most part of words in these nine languages, viz:-r. English. 2. Low Dutch. 3. High Dutch. 4. French. 5. Italian. 6. Spanish. 7. Latine. 8. Greek. 9. Hebrew, etc. ; which are so laid together for the help of memorie, that any one with ease and facilitie may not only remember .Jure, five, or more of these languages so laid together, but also by heir Etymologies under the Name, know the Nature, Property, Condition, Effect, Matter, Forme, Fashion or End of things thereunder contained, differing from all other Dictionaries ever heretofore set forth ; also the Exposition of the Termes of the Lawes of this Land drawn from their originall the Saxon and Norman Tongues, with the descriptions of the Magistracies, Offices and Officers, and Titles of Dignity noted with this द्यु throughout the whole Booke. Item: there are added the Etymologies of proper names of the Bible, Adam, Eve, Cain, Abel, Seth, etc., with the

Etymologies of Countries, Cities, Townes, Hilles, Rivers, Flouds, Promontories, Ports, Creekes, Islands, Seas, Men, Women, Gods, Peoples, and other things of note, which are marked with this mark, ( $\dagger$, through the whole worke. By the Industrie, Studie, Labour, and at the charges of Iohn Minsheu, Published and Printed 22. July, Anno 1625. The Second Edition, Cum gratia et privilegio Regiæ Majestatis, and are to be sold at Iohn Brownes shop, a bookseller in Little Britaine, without Aldersgate Street in London: (et venales extant Londini apud Iohannem Browne, Bibliopolam in Vico vocato Little Britaine." The Dedication is in the usual abject strain, and in Latin of course. It is addressed "to the most reverend prelate and his most honoured lord, John, by Divine providence Bishop of Lincoln and Keeper of the Great Seal of all Ergland."
"According to the pleasure of God Supreme," he says, "ye who are raised to high place, are so raised that ye may aid those who are below you; an office as suited to your rank, as likely to yield consolation to many. However, it is not the hope of reward, but a reverential respect that brings me to dedicate to you this book. If it shall please your dignity to regard it favourably and to condone my audacity, this is the utmost of my aspirations." He adds that he has toiled at the perfecting of this second edition, because he is now old and deaf, and unfit for any other kind of employment. He then enumerates the
etymologies which he has collected, as al-مady detailed in the title-page, and quotes from Plato the saying that "he who understands words, understands also the things which they represent;" and from Isidorus a kind of converse statement of the same idea: "If you be ignorant of the names of things, your knowledge of the things themselves comes to nought." This Bishop of Lincoln, and, as Minsheu adds, Kecper of the Great Seal of Ali England, was the famous Lord Keeper Williams, to whom, by the advice of the favourite, Buckingham, James I. confided that sacred atensil on the fall of Lord Bacon. He was afterwards Archbishop of York. Minsheu was doubtless well-acquainted with his tastes. In his youth, we are told, Williams "surrendered up his whole time to dive into the immense well of knowledge which hath no bottom." He was remarkable for his powerful memory and for his great facility in learning languages and applying terms of art. When he was elevated to the supreme seat in the Court of Chancery as Lord Keeper, the lawyers, having a certain contempt for him as an ecclesiastic, used sonnetimes to try to puzzle him with pedantic legal technicalities; but he did not fail often to turn the laugh of the whole Court against them, by drawing upon his old stores of scholastic logic acquired in the University.

Throughout his book, Minsheu, which when Latinized appears as Minshæus, places a number before each article. That prefixed to the last is 14,713 . The first word in each article is of course in English, and is printed in black letter. The High and Low German interpretations are in the same character. What with words in black letter, words in italic, plentifully mingled with words in Roman type, Greek words full of abbreviations, and occasionally some

Hebrew, a multitude of contractions, symbols and figures of reference, many of the articles in Minsheu have somewhat the look of a thicket of brambles. A profusion of abstruse legal antiquarian matter is introduced with the authorities. He is diffuse on officials employed about courts, Legal and Royal. He enumerates twenty-five kinds of "clarkes," as he spells the word, in accordance with the pronunciation of the word in his day and now ; Clarkes of the parliament, of the Rolles, of the Pell, of the Pipe, of the Hanaper or Hamper, of the Sewers, etc., etc., with ample descriptions of their respective duties. His definitions are often curious. Algebra is "the art of figurative numbers; or æquation; or the art of bone-setting-from the Arabic Alchébra, the same." ("Bone-setting" refers to Napier's bones, so-called, they were little square ivory rods, invented by Lord Napier of Merchiston, to facilitate the process of multiplication.") An Idiot (in Law) is "he that is a foole naturally, from his birth, and knoweth not how to account or num. ber twenty pence, or cannot name his father or mother, nor of what age himself is, or such like easie or common matters; but if he have so much knowledge that he can reade or learne to reade, or can measure an ell of cloth, or name the daies of the weeke, etc., then it appeareth such a one is no Idiot." "Tobaco" is so called, " in all the languages, from an island of the same name, in which it is abundantly produced: in the language of the natives it is peicielt or pilciet." Under "Nicotian" he tells us the plant was called also " queen-mother herbe: quia Catharina de Medicis, trium Gallix regum mater, habuit sibi donum à D. Johanne Nicoto, qui primus eam in Galliam attulit, (in 1560, when Nicot was French ambassador to Portugal.)

America, Minsheu tells us, is "the Fourth Part of the World, late found-out in the west part of the world by Americus Vespuctius, of whom it retains the name of America." A mercurialist is "one born under the planet Mercurie; also humorous, phantasticall, as one having mercurie or quicksilver in his head." To storm is " to make a foull coyle." One of the interpretations of "Groin" is "a port of Spain, Coruña." (This sailur's corruption is more commonly spelt Groyne.") A Griffin is a winged quadruped so powerful that it can lift and carry away through the air an armed horseman with his horse.
We have peny, penie, and pennie, for penny. The equivalent given for the word in German is denier; in Italian, dinaro; in Spanish, dinero ; in Latin, denarius. What 2 pity that in England peny or penny should have been adopted to represent denarius, when its equivalents in all other countries are so different in furm. It has led to such absurd ideas in the English popular mind. In denarius there is the notion of ten, of which there is no inkling in penny. In militari enim stipendio semper pro decem assibus est datus. It was the pay per day of a Roman soldier, and was deemed a fair day's wage for an ordinary labourer. On this continent, at the present day, dime for denarius would be better than penny, as it involves the notion of ten, although it would fail by about three cents to come up to the value intended to be signified.
We have clues to pronunciation in Minsheu's day, in some instances. Thus, "boy," now usually spelt "buoy," is the floating object which indicates the place of an anchor; and we are told that it comes from the French bois, a piece of wood, although, I believe, it is better derived from 2 Dutch word denoting leather or skin, possibly the stuffed skin of an animal.

For "colonel," which, by the way, is from the Latin columna, and indicates one of the lesser pillars, the colonellæ, as it were, of an army, we are referred to coronal, this being then as now, the corrupted vocal rendering of the word. Then, we have the "keie" of a river or haven spoken of, meaning a wharf or landing-place; with the "keie" of a lock spelt just the same. In regard to the $t$ in "chestnut," there is no hesitation, as there long was with English and United States lexicographers (happily there is none now). With Minsheu, the French chastaigne, the Italian castigna, the Spanish castaña, the Ceutonic kastanie, the Latin castanea, the Greek kastanicon caryon, settled the question. "Things not generally known" are told us about fingers in Minsheu. Each one of the fingers has special associations connected with it. The following verse which recalls some of these-Miles, mercator, stultus, maritus, amatorwe may imagine the mediæval schoolboy repeating ojer, as he passed from the thumb to the little finger. The thumb denotes the soldier : without it, the man who handles the bow, would be powerless. For miles in this verse, doctor was sometimes substituted, i. e., preceptor or teacher ; without the thumb how could the almighty birch be applied? The next was the merchant or trader: it is wanted for counting and calculating : it is styled also the index, and has the epithets sometimes of minans, and minitans. The middle finger stands for folly. In the Middle Ages this middle finger had a bad reputation and seems to have been occasionally put to base uses. It is styled digitus infamis, impudicus, verpus. In one of the old dictionaries I have seen it called in plain English, "lick-pot," from the use to which gluttons sometimes put it. The next is maritus, the wedded man (not merely the wedded woman as now), the digitus annularis, or ring
finger. It is likewise styled digitus studiosorum, the finger of the studious or learned, also, probably from the ring worn on it as a part of the insignia of a degrec. Another name for this ring-finger, curiously, was digitus medicus, "because the ancient physicians used to mix their medicines with it," (quia prisci medici miscerent eo pharmaca). Finally, the last or little finger is designated amator in the monkish verse. It bears circlets and gems given and received as pledges of mutual affection. Another name for this finger was digitus auricularis, the ear-finger; by its help, we, for the most part, scratch the ear and clear
it of obstructions. In his article on metropolitan Minsheu indulges, I ob. serve, in flattering notices, couched in his best Latin, of George Abbots and Tobias Matthew, the then Archbishops of Canterbury and York. Of the former, he says, the King (Rex noster Jacobus), had advanced him to the highest pitch of honour and digni. ty solely on account of his preeminent talents and his meritorious services to the Church and Commonwealth both in England and Scotland, whilst the latter he pronounces a prelate learned and eloquent, and indefatigable in preaching; an ensample of virtue, industry, labour and hospitality.

## RHYME.

IT is surprising that so artificial a device as rhyme should have attained the dignified and acknowledged position which it occupies in modern literature. Its sole merit is in the harmony resulting from the recurrence of similar sounds at the end of metrical lines, except that sometimes, in a lively and jingling composition, or in describing certain repeated noises, as in Poe's "Bells," it may have an onomatopoetic value.

Yet it never would have been brought into such general use, if it had not developed a capability of producing, with the help of versification -which rhyme assists by marking the divisions of verses,-and of allitera-tion-which is but a rhyme of letters, -the sweetest and subtlest effects of mere sound of language. In this it subserves one of the highest purposes of poetry; for, according to Puttenham, "Poesie is a pleasant manner of utterance, varying from the ordinary, to refresh the mind by the ear's delight." Rhyme, nevertheless, is not only artificial and inde? endent of
sense, but is, furthermore, a direct restraint upon simple and forcible expression. How much it may be owing to the prevalence of rhyme and of lyrical verse, I do not know, that recent poetry has lost so much of that terseness and force which we find in "Shakespeare," in "Paradise Lost," in Young's "Night Thoughts," in Cowper's "Task," and in E yant's "Thanotopsis." Pretty sentiments prettily expressed, with a pleasant ring of words, has, to a great extent, taken the place of those better sayings of the poets, pregnant with intensity and power, which, when quoted, carry in themselves the spell of eloquence and of heroic song. The Civil War scarcely produced a strong, noble poem, though it inspired many beautiful ones. Yet the prevailing tone of our prose writings is similar to that which I have described in cur poetry; and the general use of rhyme may be a result rather than a cause. There is evident, in all the literary work of the time, a striving for style and form, for fine-sounding words and well-balanced
periods, rather than for straightforward and forcible expression of earnest ideas. In the best writing, of course, the two characteristics combine and subserve each other. It is well that the ear should be pleased; for rhyme, like beauty, is its own excuse for being; but, also, let the mind be instructed and the heart benefited.

To try to trace the origin of rhyme might be like attempting to trace the origin of music. Men, if not wholly given up to treason, stratagems, and spoils, naturally seek for "concourse of sounds" and of curious resemblances and harmonies of words. Any people with a literature would, therefore, be likely to discover similarities of sound in their language, even though these were not made use of by the best poets as an ornament of verse. It is scarcely reasonable to say that because Greek and Roman poets did not use rhyme, it was therefore unknown to them. The prevalence of Leonine verses in Latin poetry and also of occasional rhyming ends which could hardly be accidental, as in the epilogue of the second book of "Fables of Phedrus," prove this. It was, more probably, thought to be a conceit out of place in dignified composition, as a pun would be in a metaphysical or religious essay. Upon the decline of the Roman Empire, however, the monks seem to have begun to add rhyming terminatiors to Latin metres, for the purpose of singing in Church service; and rhyme grew more popular with succeeding years. In the barbarism of the sixth and seventh centuries, when the quantity and metre of Latin poetry began to be disregarded, rhyme served to give to what was called poetry a distinct character from prose, which, it would not, perhaps, have otherwise had. There is a wretched song preserved, which was written near the beginning of the seventh century,
in honour of Chlotarius II., on the return of the bloody expedition against the Saxon country, when, it is said, the French king would not permit a single man to live who was taller then his sword. It commences:

De Chlotario canere est rege Francorum Qui ivit pugnare cum gente Saxonum. Quam graviter proveni..set missis Saxonum Si non fuisset inclitus Faro degente Burgun. dionum,
Quando veniunt in terram Francoram, Faro ubi erat princeps, missi Saxonum, Instinctu Dei transeunt per urbem Meldurum, Ne interficiantur a rege Francorum.

A century or two later, rhyme had became a recognized, poetical ornament, instead of a mere playful and ingenious device. Here are two stanzas of the hymn on the Epiphany, written in the ninth century, by a German monk, Hartmann :

> Tribus signis Deo dignis
> Dies ista colitur; Tria signa Laude digna
> Coetus hic persequitur.
> Stella magos
> Duxit vagos
> Ad presepe Domini;
> Congaudentes
> Omnes gentes
> Ejus psallunt nomini.

As with many other recreations of literature, it will be seen, ic passing, that we have principally received rhyme from the monks of the Middle Ages, in whose psalms it first became popular.

The subtleties and marvels of language were always the peculiar delight of pious and learned men. Even of so notable and exemplary a preacher as Dr. Isaac Barrow-towhomCharles II. objected, because he left nothing to be said on the other sidewe read a pertinent anecdote in illustration of this. In those days, candidates for Holy Orders were expected to respond in Latin to interrogatories put to them by the bishop or examin-
ing chaplain. When Dr. Barrow had taken his bachelor's degree, he presented himself to the bishop's chaplain, who, with stern visage, asked: "Quid est fides?" (What is faith?) "(luad non vides." (What thou dost not see), replied Barrow, promptly. The chaplain, somewhat disconcerted, asked still more sternly, "Quid est spes?" (What is hope?) "Magna res." (A great thing), answered Marrow. If the slang phrase "a big thing" had been prevalent at that time, so as to suggest itself as the first interpretation, that answer would probably have been sufficient. But the answer being quite respectful and apt, the chaplain kept on. "Quid est charitas?" (What is charity?) "Mag. na raritas." (A great rarity), replied Barrow. The reverend 'examiner, feeling his dignity somewhat wounded, went to the bishop and related the rhyming answers of the young Cantab, concluding by saying that his name was Barrow, and that he was of Trinity College, Cambridge. "Then," said the bishop, who knew Barrow, "ask him no more questions; for he is much better qualified to examine us, than we him."

Early Anglo-Saxon poetry is without rhyme until the ninth or tenth century. One of the first poems with final rhyme in the Gothic dialect is "Olfrid's Evangely," written in Frankish, about 870 . The Italian poets early employed rhyme. It is used in Dante's "Divina Comedia," but Long. fellow has deemed it essential r"a correct translation to throw off its fetters.

Puttenham thinks that rhyme comes by nature. The capacity to write good rhymes is certainly not innate in all men, but possibly the pleasure in them is a common gift to humanity. We all remembar the delight which our downing intellects experienced in the reiteration of similar sounds, such as in the words "Teeter-tawter, milk
and water," accumpanied by a con. current motion at the end of 2 lumb or of a well-balanced plank. I have 2 vivid recollection of the satisfaction with which I heard the following nd dle :
As I went out I saw heldum-beldum, Tearing down the world of wigdum-waghum. 1 sent out hanus-skanus to scare away he. dum-heldum,
Tearing down the world of wigdum-waghuri:
In this astute production, heldun beldum means a pig, hanus-skanus a dog, and the world of wigdum-wagdum a corn-field.

The proverbs longest remembered are those with rhyme or alliteration. Furthermore, the common classes, in conning or adopting words, have shown a remarkable predilection for rhyme. Notice such words and phrases as tip-top, pell-mell, helterskelter, harum-skarum, tittle-tattle, nam.by-pamby, clap-trap, hodge-podge, hob-goblin, bow-wow, tee-hee (alaugh), chit-chat, pow-wow, chow-chow, dydo, so-so, hubbub, hurdy-gurdy, hurlyburly, big-wig, big-bug, shilly-shally, higgledy-piggledy, tlim-flam, humdrum, fiddle-faddle, tit for tat, dingdong, rub-a-dub, nick-nack, etc. Many of these, of course, are onomatopoetic. There is also a fondness for such phrases as nisi-prius, nolens-volens, will he, nil he; the first two of which are aften pronounced by the ma'ses nis-priz and nolus-bolus. Til. lotson says the words hocus-pocus are probably a corruption of hoc est corpus, " by way of ridiculous imitation of the priests of the Church of Rome in their trick of Transubstantiation." In provincial English dialects, "giff-gaff" means unpremeditated talk; " muckson up to the huckson," means dirty up to the knuckles; " nought that's aught" means good for nothing; "gad-bad " means very ill; "riffrrafi" means low people or refuse; "hug-ger-nugger" means peevish or crossgrained. Spenser has this passage:

The patrimnny which a few
Now hold in liugger-mugger in their hand And all the rest do rob of goods or land.
In Diishop Hall's Satires is this ing:.
Thuick-thwack and nffreff! roars he out alcud.

Riff-raff is said by Florio to come from the Italian ruffola-raffola;" by hooke or crooke, by pinching and scraping, helter-skelter, higgledie-piggledie." Helter-skelter is supposed by some to have its origin in the Latin hilariter celeriter.
(To be continued.)

## UNIVERSITY WORK.

## MATHEMATICS.

Ariminali MacMinchy, M.A., Toronto, Ebitor.

## SOLUTION:

By Iva E. Martin, St. Catharines.
(See Monthly for March, 1883 .)
Let $N=a^{a} \boldsymbol{f}^{\boldsymbol{\beta}} c^{\gamma}$.
All numbers less than $N$ are prime to it, except the series $a, 2 a, 3 a \ldots \ldots N$. (1) $b$, ${ }^{2}$, $3^{h}$.. .. $N$; (2) c, 2c, 3c ..... N; (3) and in these the numbers $a b, 2 a b \ldots \ldots$; b, $2 b_{i} \ldots \ldots N$; ca, $2 c a \ldots . . N$, are repeated : and since in each of the above series of numbers the series $a b c, 2 a b c$, etc., $N$ occur, we have this series also not prime to $N$.
$\therefore$ the sum of the squares of the numbers less than $N$ and prime to it

$$
\begin{aligned}
& \pm \lambda^{2}-a= \pm\left(\frac{N}{a}\right)^{\prime}-b=\sum\left(\frac{N}{b}\right)^{2}-c=\sum\left(\frac{N}{c}\right)^{n} \\
& +a b \equiv\left(\frac{N}{a b}\right)^{2}+b c \sum\left(\frac{N}{b c}\right)^{2}+c a \sum\left(\frac{N}{c a}\right)^{2} \\
& -a b i \sum\left(\frac{N}{a b c}\right)^{*} \\
& =\left\{\frac{N^{3}}{3}+\frac{N u}{2}+\frac{N}{6}\right\}-\left\{\frac{N^{3}}{3^{a}}+\frac{N^{2}}{2}+\frac{a N}{6}\right\} \\
& -\left\{\frac{N^{3}}{36}+\frac{N^{2}}{2}+\frac{N b}{6}\right\} \\
& -\left\{\frac{N^{z}}{3^{c}}+\frac{N^{z}}{2}+\frac{c N}{6}\right\} \\
& +\left\{\frac{N^{z}}{3 a^{b}}+\frac{N^{2}}{2}+\frac{a b N}{6}\right\}
\end{aligned}
$$

$$
\begin{aligned}
& +\left\{\frac{N^{v}}{3 b c}+\frac{N^{3}}{2}+\frac{b c N}{6}\right\} \\
& +\quad\left\{\frac{N^{v}}{3 c a}+\frac{N^{N}}{2}+\frac{N c a}{6}\right\} \\
& -\left\{\frac{N^{3}}{3+b c}+\frac{N^{a}}{2}+\frac{a b c N}{6}\right\} \\
& =\frac{N^{3}}{3}\left\{1-\frac{1}{a}-\frac{1}{b}-\frac{1}{6}+\frac{1}{a b}+\frac{1}{b c}+\frac{1}{c a}-\frac{1}{a b c}\right\} \\
& +
\end{aligned}
$$

The sum of the cubes and the sum of the fourth powers may be found by substituting in the expressions $2 N^{2}-a^{2} \geq\left(\frac{N}{a}\right)^{2}-$ etc.,

$$
\text { and } \sum N^{\bullet}-a^{\bullet} \sum\left(\frac{N}{a}\right)^{\bullet}-\text { etc. }
$$

the value of $\Sigma^{2}, \sum\left(\frac{N}{a}\right)^{2}$ etc.
UNIVERSITY OF TORONTO.
anNUAL EXAMINATIONS: $\mathrm{IBs}_{3}$.
First Year.
Algebra and Trigonometry.
HONJRS
Eraminer: W. Fitzgerald, M.A.
I. Solve,
(1) $\left\{\begin{array}{l}x^{2}+x y=65 \\ y^{2}-x y=24\end{array}\right.$

$$
\text { (2) }\left\{\begin{array}{l}
x^{0}+y^{0}+(x+y) x y=13 \\
\frac{x^{0}}{x+y}=36
\end{array}\right.
$$

2. Find the number of variations of $m$ different letters taken :ogether: also the number of such variations, when each may enter $1,2,3$, etc., or $r$ times in each variation.

If the number of variations of $a+b$ things taken two lingether be 56, and of $a-b$ things 12, find the number of combinations of $a$ things, taken $b$ together.
3. State the Binomial Theorem, and prove it when the index is a positive integer.

Expand to five terms, $(a-3 x)^{-1}$.
4. Find the present value of an annuity $A$ for $m$ years at compound interest.

The reversion of a freehold estate worth $P$ pounds per annum to commence $a$ years hence is to be sold. Ascertain its present value at $R$ per cent. per annum compound interest.
5. Define a continued fraction, and illus. trate the method of converting a quadratic surd to a continued fraction.

Express as continued fractions

$$
\text { (1) } \sqrt{11} \text {; (2) } \sqrt{13} \text {; (3) } \sqrt{17}
$$

6. What is a recurring series?

Explain what is meant by the scale of rela. tion of a recurring series.

Sum to $n$ teras, and ad infinitum the series

$$
\frac{1}{1.2 \cdot 3}+\frac{1}{2 \cdot 3 \cdot 4}+\frac{1}{3 \cdot 4 \cdot 5}++
$$

7. Find the radii of the inscribed and escribed circles of a trirngle in terms of the sides and angles.
8. In any triangle prove:
(1) $\frac{\sin (B-C)}{\sin (C-A)}=\frac{\left(b^{2}-c^{2}\right) \sin B}{\left(c^{2}-a^{2}\right) \sin C}$.
(2) Area $=\frac{1}{2}\left(b^{2}+c^{2}\right) \frac{a \sin B \sin C}{b \sin B+c \sin C^{\circ}}$

1 9. Show how to expand $a^{\mu}$ in a series of ascending powers of $x$.
10. State Demoivre's Theorem, and assuming its truth, prove,
(1) $\cos a=1-\frac{a^{2}}{1.2}+\frac{a^{4}}{1 \cdot 2 \cdot 3 \cdot 4} \ldots$ etc.
(2) $\sin a=a-\frac{a^{\prime}}{1.2 .3}+e i c \ldots$
11. Sum to $\boldsymbol{n}$ terms:
$\sin A-\sin (A+a)+\sin (A+2 a) . x$.
and deduce the sum of $n$ terms of the revim $\cos A-\cos 2 A+\cos 3^{A} \ldots$ etc.

Kïst Examimation (Pass.)
2. (1) Given $\left\{\begin{array}{l}x: y:: a: b \\ x^{\bullet}+y^{*}=c^{\bullet}\end{array}\right\}$
find the values of $x$ and $y$.
(2) Given $\left(\left.\begin{array}{l}2 x+4 y-3 z=22 \\ 4 x-2 y+5 z=18 \\ 6 x+3 y-2 z=31\end{array} \right\rvert\,\right.$
find the values of $x, y$, and $s$.
2. Solve the following equations:
(i) $\left\{\begin{aligned} x^{2}+y^{3} & =41 \\ x y & =20\end{aligned}\right\}$
(2) $x^{4}-4 x^{2}+6 x^{2}-4 x-15=0$.
(3) $\left\{\begin{array}{c}x^{2}+x y+y^{4}=7 \\ x^{4}+x^{4} y^{4}+y^{4}=21\end{array}\right\}$
3. Define an arithmetical and a geometnca: series.
(i) Find the $m^{\text {th }}$ term, and the sum of: terms of an arithmetical scries.
(2) Insert five arithmetical means betwees 3 and 16.
4. In a geometrical series, if the ratio te a proper fraction, show that the sum of the series when the number of terms is increased indefinitely bas a limiting value.

The limit of the sum of a geometrici: series is $3 \frac{1}{3}$, and the second term is $\frac{-5}{2} ;$ find the series.
5. Find three numbers in geometrical progression such that their sum shall be 21 , and the sum of their squares 189 .
6. Define the trigonometrical ratios of 2 a angle less than $90^{\circ}$, and prove:
(1) $\sin ^{2} A+\cos ^{2} A=1$.
(2) $\sin A \cos A=\frac{I}{\tan A+\cot A}$.
7. Prove the following formulx:
(1) $\sin \overline{A-B}=\sin A \cos B-\cos A \sin B$.
(2) $\tan \frac{1}{2} A=\frac{1-\cos A}{\sin A}$.
s. In any triangle eatablish the following relations:
(1) $\frac{\sin A}{a}=\frac{\sin R}{b}=\frac{\sin C}{c}$.
(2) $\cos A=\frac{b^{\circ}+r^{\circ}-a^{\circ}}{2 h c^{\circ}}$.
(3) Area $=\gamma^{\prime}(r-a)(s-b)(s-r)$.
0. Having given two sides and the inclurled angle of a triangle, oblain formula from which to find the other two angles and the third side.
10. Discuss the ambigunus case in the sointion of triangles.
11. Find the sine and cosine of $45^{\circ}$ and $3^{\circ}$, and deduce those of $75^{\circ}$ and $15^{\circ}$.

## ARITIIMETICAL PROBLEMS.

Hy W. S. Ellis, B.A., Mathematical Master, Cobourg Coll. Inst.

1. When 8 eggs cost 7 cents, how much should a man ask for 20 dosen so that he may kain ! of cost?

Ans. \$2.52.
2. Cigars which cost $\$ 60$ a thousand are sold at the rate of three for 25 cents, what is the dealer's profit on $\$ 100$ ihus expended? Ans. \$38.88;
3. A dealer pays $\$ 60$ for 1,000 cigars and selis part of them at to cents apiece, and part at the rate of three for 25 cents, realizing altogether $\$ 90$; how many did he sell at the first rate?

Ams. 400.
4. If it costs $\$ 3$ to frame a picture 2 ft . by 3 , how much will it cost to frame one 3 ft . by 4 , with moulding costing $1 \frac{1}{2}$ times as much $1 s$ in the first case?

Ans. \$6.30.
5. On a collection plate were a number of 25 cent pieces, four times as many to cent pleces, and twelve times as many 5 cent preces; had each coin been a 25 cent piece the collection would have been greater than It was by $\$ 36$; what was the value of the collection?

Ans. \$15.
6. A person standing on a wharf sees two guns fired on board a vessel sailing directly towards him ; the time between the first fiash and the report is 18 seconds, and between the second flash and the report is 14 seconds; the interval between the flashes is 15 minutes.

Find the rate at which the ressel is miling, given that sound iravels 1,120 leet per second. Ans. Jif miles an hour.
7. The rate of interest on certain debentures is $\&$ per cent. half.yeurly; how much ahould a man pay for these mo that he may make 3 per cent. per annum, simple interest. on his money; the purchase taking place 2 years before the debentures are payable, and the interest on them remaining unpaid dur. ing that time? Ans. (ifg) $\times$ fif.
8. A grocer has tea which cont him 60 cents per lb., and some which cost him 90 cents per lb. : how must he mix them so that by selling the mixture at $8_{4}$ cents per lb., he will be making 20 per cent. on cost?

Ans. I at $90 ; 2$ at 60.
9. On January ist, '81, a person invested $\$ 8,000$ in 6 per cent. stocks at 95 ; on July ist he received a year's dividend on the stock he held; on Seplember ist he sold out at 97, and immediately invested $\$ 5,000$ in 7 per cent. stock at $t 10$, and the rest of the proceeds in 5 percents at 75 ; on July ist, '83. he got year's dividend on the 7 percents, and sold out of both stocks-the 7 percents at 108 , and the 5 percents at 80 ; how much did be make by his deal, calling money worth 8 per cent. per annum, simple interest.

Ams. \$192.60.
10. A man spends $\$ 8,000$ buying stocks on a 10 per cent. margin at 90 (i.s., he paid to per cent. of the quoted price); he had to deposit a further sum of 5 per cent. of the quoted price of the stocks he had bought, with his broker as security. At the end of one month he sold out at 95 , for cash, and paid up what was still due on his purchase. together with interest on unpaid part at 5 per cent. per annum. Calling money worth 8 per cent. per annum, how much did he clear on the transaction?

Solu'ion: stocks secured, $\$ 88,888.89$; money laid out, $\$ 12,000$; price received for stocks, $\$ 84,444.44$; mount due, with inter. est, $\$ 72,300 ; \$ 12,000$ for one monthamounts to $\$ 12,080$. Whole expenditure therefore is $\$ 80,380$. Whole receipts, $\$ 84,444$ 44.Gain, $\$ 4,064.44$.
11. Large shipments of bullion from Lon-
don to New York cause a ne in the price of gold in Fingland. Why?

Explain the terms " bulloon," and "price of gold."
12. Define the terms, as umed in commercial transactions: (a) insolvent, ( $h$ ) bankrupt. (c) "fall in stockn," (d) bill of lading. $(f)$ draft, ( $f$ ) invoice, is) premium, ( $A$ ) commission, ( 1 ) insurance.

## CI.ASSICS.

G. K. Rontmeon. M.A., Whitmv, Rilitan.

## UNIVERSITY OF TORONTO AN. NUAL EXAMINATIONS. 1883. <br> First Examimation.

I...in.

Examiner: Aidam Carritirrs, B.A. Tranalate:

Dam ea Romanii parant consultantque, jam Saguntum sumna vi oppugnabatur. Civitas ea longe opulentissima ultra Hiberum fuit, sita passus mille ferme a mari. Oriundi a Zarratho insula dicuntur, mixtique etiam ab Ardea Rutulorum quidam generis; caeterum in tantas brevi creverant opes seu maritimis seu terrestribus fractibus seu mu!!:tudinis incremento seu dieciphinace sanctitals. que fidem sociaiem usque ad perniciem suam coluerunt. Hannibal infesto exercitu in gressus fines prevastatis passim agris urbem tripertito adgreditur. Angulus muri erat in planiorem patentioremque quam caetera circa vallem vergens; adversus eum vineas agere instituit, per quas aries mornibus admoveri posset.

Livy, XXI.

1. Dum ea Romani farant consultantque. Explain.
2. Locate Sagumium, Zacynthus and Ardea.
3. Parse (giving the principal parts of the verbs) passus, gen-ris, creverant, agere, admoveri, possel.

Translate:
Gilli occursant in ripam cum variis ululati. bus cantuque moris sui quatientex scuta super eapita vibrantesque dexteris tela, quamquam et ex adverso terrebat tanta vis navium cum ingenti sono fluminis el clamore vario nau-
tarum militum, et qui nitebaniur perrumprée impelum fuminis et qui ex alters n;a trajicientex auos hortahantur. Jam sa's paventes adverm tumulta terribilone abierin adortus clamor cabtris ab Hannone cap'is mox et ipse aderat, ancepaque terror circ:m. stabat et e navitus ianta $v$ armatorum in terram evadente et ab tergo imprivia premente acie. Galli postquam ultronue vim facere conati pellebantur, qua pateie visum maxime iter, perrumpunt trepidique n vicos pasaim suos diffugiunt. Hannilas! cacteris copiis per otium trajectis spernens jam Giallions tu:nultus castra locat. - Ih.

1. Trace briefly the progress of the wat down to the time of the evente narratel in this chapter.
2. Mark the quantity of each of the oy. lables in ripam, ululations, moris, sculd, s.me. clamore, riadente, and releris.
3. Decline maris, ris, imferum, anreft, and iser.
4. Discuss concisely the $n$, its of Lavg at a historian.

Translate :
Vides, ut alta stet nive cancidum Soracte, nec jam sustineant onus Silvae laborantes, geluque

Fluminia constiterint acuto.
Dissolve frigus, ligna super foco
Large reponens, atque benignius Deprome quadrimum Sabina,

O Thaliarche, merum diota, Permitte Divis cetera, qui simul Stravere ventos aequore fervido Deproeliantes, dee cupressi Nec veteres agitantur orni. Quid sit futurum cras, fuge quaerere, et Quem Fors dierum cunque dabit, lucro

Appone, nec, dulces amores
Sperne puer neque tu chorez ,
Donec virenti anities abest
Morosa. Nunc et campus et areae
Lenesque sub noctem susurri
Composita repetantur hora, Nunc et latentis proditor intimo Gratus puellae risus ab angulo

Pignusque dereptum lacertis
Aut digito male pertinaci.
Horack, Odis, I.

1. Scan and give the metrical names of the first four rerses. What is the atanza cailed?
2. Ierive Thalinerche, diota, caniturs, fandCar, and anambe.
i. I'arse sastimatat, cringur. howligems, ti, a:terr, repifampar. latemies, and lacrotes.
3. Define S.yrn Partor. (ive a list of I yric Poeta in Greck, Latin and linglish.

Translate :
Jamque ndeo exierat portis equitatus aper. 18:
Fincas inter primos el fidus Achates:
Inile alit Trojae proceres; ipse agmin. Iallas In medio, chlamyde et pictis corspectus in armis:
Wualis uhi oseani perfurus I-ucifer unda. !uem Venus ante alios astroum diligit ignes, Extulit oa sacrum coelo, tenebrasque resolvit. Siant pavidae in muris matres, oculisque sequuntar
Pulveream nubem et fulgentes were catervas. Oilı, er dumos, qua proxima meta viarum,
Armati tendunt. It clamor, et agmine facto Guadrupedante putretm sonitu quatit ungula campum.
Es ingens gelidum lucus prope Cecritis amnem.
Religione patrum late sacer; undique colles Inciusere cavi et nigra net. .s abiete cingunt. Virgil, Fincid, VIII.

1. Scan the first four verses of the extract.
2. Decline (marking quantites) Venus, os. acre, luins, and memses.
3. Give a short sketch of Virgil's life.
4. Uescribe the Shield of Emeas. What other poets have left similar deacriptions?
. $1 / 1 \mathrm{the}$ Years.

## LATIN GRAMMAR.

Eximiner: William Dale, " 4.

1. Distinguish between the root and the stem of a word. Point out the root and the stem respectively of the words gloria, laws, funs'r, examen, affus.
2. Write down the genitive singular of olus, cuceps, Awio, mus, ales, and the genitive plural of $d$ mis, heros, locuples, rete, ancile.
3. Express in Latio: Two camps; exactly
two days: iwn millons: two-thirds: the mecond of May.
4. Distinguish the indefinite pronouns guis, gmisymam, and guispuem. Therlime pmis fa. definite) in the plaral.
5. Write down the rat pera. sing. perf. ind. ect. of adjuzes, rlisio, salw, sapio. tern. and the supines of sero (smen), ecisco. taro. misiscor, mando.
6. Analyte the formation if the words
 flamera.
7. Give examples of the use of the locative case to exprese (1) place at which. (2) time when, (3) price at which.
8. W'ben is the dstive case uned to express the percon hy whom a thing is dose?
o. Explain the use of the subjunciive mood in .ise following sentences:-
(1) Kogitant me ut valeam.
(2) Juguriha timebat iram senatus, ni paruisset legatis.
(3) Sapiens non dubitat, $3 t$ ita melius sit. migrare de vita.
(4) Zenonem, cum Athenis essem, audie. bam frequenter.
9. Translate into Latin:
(1) His words were more truthful than pleasing.
(2) They invite each other to their houses.
(3) Cresar's army was too powerful to be resisted with success.
(4) It was owing to you hat I did not come.
(5) Be sure not in believe that it is necessary to make haste.

## All the Years.

LATIN PROSE.
Examiner: AdAm Johnston, B.A., LL.B.
N.B. - Pass Candidates are to take only part 1 ; Honor Candidates, both parts.
I.

In the same night it happened that there was a full moon, which was accustomed to make the sen tides very large in the ocean, and this was unknown to our men. So at one time both the tide kept filling the ships of wal by means of which Casar had caused
the army to be brought over, and which he had drawn up upon dry ground, and the storm kept tossing the ships of burden which had been tied at anchor, nor was any opportunity offered to our men either of managing them or of rendering aid (auxiliare). After very many ships had been shattered, since the rest were useless for sailing, having lost their ropes, anchors, and the rest of their equipments (armamentum), a great alarm (perturbatio) was caused in the whole army, a thing which must necessarily happen. For neither were here any other ships by which they could be carried back, and all things were lacking which were of use for reparing them; and because it was a settled fact in the minds of all (constare) that they ought to winter in Gaul, corn had not been provided in these places for the winter.
II.

The Gauls were gone, and the ruins of Rome were possessed again by the Romans. The Flamen of Quirinus and the vestal virgins returned from Caere; and the eternal fire, unextinguished by the late calamity, was restored to its accustomed place in the temple of Vesta. But the fugitives wno had fled to Veii from the rout at the Alia, and who formed a large proportion of the Roman people, were unwilling to leave the city which for several months had been their only country ; at Veii they had houses already built, and perhaps they were not sorry to escape from the ascendancy of the patricians, and to settle themselves in 2 new city of which they would be the original citizens. Thus Rome was threatened anew with such a division of the strength of the commonwealth as must have insured its ruin; for some of the patricians would, no doubt, have removed to Veii, while others, with their clients, would as certainly have remained at Rome. At this period the name and ability of Camillus were most effectual in putting an end to the dissension, and in determining that the proposed secession to Veii should be utterly abandoned : but by what means or at what time his exile was reversed we cannot discover. It may be true, that while the Gauls were in possession of Rome he had encour-
aged the people of Ardea, where he had become a citizen, to take up arms against the Gaulish plundering parties ; he may also, in such a time of necessity, have been chosen commander by some of the Romans who had fled from the city, and with them he may have done good service, both in cutting off the enemg's stragglers, and perhaps in harassing their rear after they began to retreat.

## MODERN LANGUAGES.

John Seath, B.A., St. Catharines, Editor.

Note.-The Editor of this Department will feel obliged if teachers and others send him a statement of such difficulties in English, History, or Moderns, as they may wish to see discussed. He will also be glad to receive Examination Papers in the work of the current year.

## ENGLISH.

## QUESTIONS ON GOLDSMITH.

Selected by J. Douglas Christie, B.A., Modern Languages Master, St. Catharines Coll. Inst.
I. What are the chief literary merits and defects of Goldsmith ?
2. What was the didactic purpose of the "Traveller"?
3. State, quoting the words of Goldsmith, f you can, the "favourite good," and the "peculiar pain" of each of the nations to which Goldsmith refers in the "Traveller."
4. Show to what extent the subsequent history of each of these nations bears out his views.
5. What were Goldsmith's views as to the dangers to which freedom and good government were exposed in England when the "Traveller" was written? Explain these views by referring to the history of the time.
6. What were the literary influences at work in the time of Goldsmith, and show how he was affected by them?
7. Show how far Goldsmith's description of Switzerland is correct.
8. Name the markedly subjective passages in the " Traveller."
9. Gije a list of Goldsmith's works, anu' name his chief contemporaries.
10. "Goldsmith's age was an age of prose." Explain the meaning of the statement.
11. State and explain the characteristics of Goldsmith's style.
12. Explain the metre of the "Traveller."
13. What is meant by saying that the "Traveller" is a didactic poem? What is its object?
14. Quote passages illustrating Goldsmith's "humour."
15. Sketch, after Goldsmith, the blessings of " nature " and of "art."
16. Criticize Goldsmith's description of the French.
17. What are the things that make the "Traveller" a popular poem?
18. Sketch the argument of the "Traveller."

## QUESTIONS ON BURKE.

By A. W. Reavely, B.A., High School, Bcamsville.

1. Give an account of the literary condition of England during the time of Burke, naming and describing the leading writers.
2. Trace the causes of the French Revolution, and give an account of the influence it has had on the history of the world.
3. State concisely Burke's attitude in regard to the Revolution, and the state of English political parties at the period.
4. Give an account of Burke's views on the nature and spirit of Chivalry.
5. What was the aim of the author? How far was it attained ?
6. To whom were the "Reflections" ad. dressed ? Quote that person's opinion of them.
7. State the circumstances which led to the publication of the "Reflections."
8. Mention the different views held in Eogland, in regard to the French Revolution, previous to the publication of the " Reflections."
9. Burke's age has been characterized as "prolific of the grandest triumphs of eloquence." What are the grounds for the above statement?
10. Give an estimate of the literary style of Burke.
11. Write brief notes on "Constitutional

Society," " Revolution Society," and " Rousseau."
12. Discuss, after Burke, "Religion is the basis of Civil Society." "Society is a contract." "The theatre is a better school of moral sentiments than churches."
13. State the connection of the following : "Murders called victories," "day seemed to blot out the sun," " pierced with an hundred strokes," "unutterable abominations," "unhallowed fire," " perfect democracy," "gods of our economical politicians."
14. (a) "A man is fallen indeed."
(b) "Because half a dozen grasshoppers." Finish the above quotations, and point out any peculiarities.
15. Quote the passage describing the Queen, and point out the principal rhetorical figures employed.
16. Write a paraphrase of the passages referred to in question 14 .

## FALSE SYNTAX.

Selected by J. Douglas Christie, B.A., St. Catharines Coll. Inst.
I. It is a phenomena common to an im. mense number of diseases.
2. Your Englishman is just as serious in his sports as in any act of his life.
3. The climate of Pau is perhaps the most genial and the best suited to invalids of any other spot in France.
4. Being without a guide, we took a wrong path, used only by shepherds, and certainly the steepest I ever climbed before.
5. Mr. Stanley was the only one of his predecessors who slaughtered the natives of the region he passed through.
6. His servant being ill, he had consented to allow his brother, a timid youth from the country, to take his place for a short time, and for that short time he was a constant source of anncyance.
7. It loves to break the chains from others' limbs, by which it disdains to have its own enfettered.
8. There are of course objections to the purchase and working of railways and canals by the State, with which we are sufficiently familiar in England.
9. He was arrested in bed, and attempted to commit suicide by firing a pistol at his head, which he had concealed amongst the bedclothes.
10. It was the necessity which made me a quarrier, that taught me to be a geologist.
II. The boat pushed off to the shore, but speedily returned with a dying man, which the Chinese had placed in a boat, who they affirmed had been mortally wounded from the blow which had been received from the piece of wood.
12. I should esteem a man a selfish coward, whom I might pity, but I do not think I could ever love him again, if in any way he did wrong for my sake.
13. Hill is one of the surviving stipendiary magistrates of the island of which he is a native, and has lived in it all his life.
14. All these princes are tributaty to the Chinese emperor, and every second ycar repair to Pekin, whither they carry, as tribute, furs and gold-dust, which their subjects collect from the sands of their rivers.
15. Luckily the monks had recently given away a couple of dogs, which were returned to them, or the breed would have been lost.
16. I must now make to you a general assertion, which, if you will note down and examine at your leisure, you will find true and useful.
17. The sight of his blood, whom they deemed invulnerable, shook the courage of the soldiers.
18. Were he still disposed to go there, my purse shall be open to him.
19. I shall have great pleasure in accept. ing your invitation.
20. Did ever man put God to the proof on that promise, and found it broken ?
21. I should have thought it a gross act of tyranny to have interfered either with his political or his religious opinions.
22. Shelley, like Byron, knew early what it was to love; almost all the great poets have.
23. We are all apt to imagine that what is, always has, and always will be.
24. You will bear it as you have so many things.
25. Being exceedingly fond of birds, an aviary is always to be found in the grounds.
26. When preparing for his examinations, I had sometimes to rise from my own bed to urge him to retire to his.
27. I really believe that, except to doctors and clergymen, even my state of extremity has been doubted.
28. Betwe-n each plane-tree are planted box-trees.
29. Do not trouble yourself about writing to me, except you are quite in the humour for it.
30. Farmers find it aar more profitable. and much less troublesome, to sell their milk wholesale to some London dealer rather than retail it in their own locality.
31. He saw that the reason why witcheraft was ridiculed was, because it was a phase of the miraculous.
32. The true explanation of the sudden change is to be attributed to his anxiety.
33. The reason why Socrates was condemned to death was on account of his unpopularity.
34. The equanimity of his temper was speedily restored.
35. I do not trumpet water as a universal panacea for all the ills that human flesh is heir to.
36. To it alone I shall confine myself.
37. A large supply of mules was obtained to supply the great destruction of those use. ful animals.
38. Much cause have you for thankfulness on account of the many temptations from which you are preserved.
39. The germ, the dawn of a new vein in literature, lies there.
40. He was fired at ; the ball striking him on his waistcoat pocket, in which he had a five-shilling piece. The bullet indented the coin, thus saving his life.
41. I then noticed that the table moved, when no one touched it but my eldest daughter.
42. He liked to hear her talk better than any of his associates.
43. In order to kill a bull, and bring him
on his knees with one blow, and without moving, is a feat which cannot be accomplished by anybody short of a very first-rate man and an unerring aim.
44. In stooping down to drink, the weight of the cart forced the nare's head first into the water, and before she could be relieved was drowned.
45. I think it may assist the reader by placing these before him in their chronological order.
46. If there is anyone embatrassed, it will not be me, and it will not be she.
47. Would it not be better to keep some memorandum of these sort of engagements?
48. One fine afternoon everybody was on deck, amusing themselves as they could.
49. I spoke it in the tone of one who is ashamed of their own absurdity.
50. My object in this letter is to express a hope that the members of this University may, each as far as lies in his power, exert their influence to obtain its removal from such a position.

## SCIENCE.

Gzorge Dickson, M.A., and R. B. Hare, Ph.D., Editors.

CHEMICAL PROBLEMS.
For First Class Candidates.
By A. McGill, Ottawa.

1. When barometer is 760 mm ., find pres.
sure of air in grams per sq. cm. (s. g. mercury $=13.596$. )
2. Barometer $=30$ inches. Find pressure per sq. in. in lbs. avoir. (i cub. ft. water $=$ 62.32 lbs.)
3. 76 c . c. dry air a: $20^{\circ} \mathrm{C}$., and 586 mm . barometric being mixed with dry hydrogen, the total volume at $15^{\circ} \mathrm{C}$. and 570 mm . is found to be $115.2 \mathrm{c} . \mathrm{c}$. On explosion the volume becomes iorf c. c., at 91 ${ }^{\circ} \mathrm{C}$., and 1001 mm . mercury. Free hydrogen is found to be present. Tension of water vapour at $91^{\circ}$ C. is 530 mm . mercury. Find p. c. composition of air by volunce.
4. The relative densities of oxygen and nitrogen being 16 and 14, calculate p.c. composition of air by weight from data above.
5. 20 utres oxygen measured at $14^{\circ} \mathrm{C}$. and 700 mm . mercury, is mixed with 15 liters nitrogen, measured at $20^{\circ} \mathrm{C}$. and 800 mm . Calculate the p. c. composition of the mixture by weight.
6. Taking coefficient of solubility at $0^{\circ} \mathrm{C}$., and 760 mm . of oxygen in water as 0.04114 , and that of nitrogen as 0.02035 , calculate the volume composition of the gas dissolved by water from above mixture at $0^{\circ} \mathrm{C}$., and 760 mm . barometer.
7. A vessel of capacity 2 litres, and capable of sustaining a pressure of 100 kilog. per sq. cm., has pumped into it 27.3 grams nitrogen at $175^{\circ} \mathrm{C}$. To what temperature must the gas be raised to burst the vessel ?

OUR young people should know more about the simple things around them than most of them do-especially those condemned to the imprisonment of town or city life; the crops our fathers raise ; the trees of the orchard, the park and the forest; the weeds and the flowers of the lane and the garden-dame

Nature's children and step-children as the old Greek story classes them ; the birds that build their nests on the ground, under the eaves, and up among the branches, and the songs they sing and when they sing them, and how they are fed, as they do not sow, wor reap, nor gather into barns.

## SCHOOL WORK.

DAVID BOYLE, ELORA, EDITOR.

## THE RECESS QUESTION.

The recess question has been much discussed of late, and many schools have adopted the plan of shortening the school session, and giving up the recess altogether. There are $t w \delta$ sides to the question, of course, and some strong arguments can be brought to bear from both points of view.

On the one hand, it is claimed that the recess is an actual injury to the health of children, especially in the winter time, when it is the cause of many and serious colds. The children often injure themselves and each other by reckless, boisterous play, the strong boys choose this time to belly and torment the weak boys, and five-sixths of the cases of discipline that worry the life out of the teacher can be directly traced to quarrels begun at recess. The opportunities for the bad children to contaminate the good, moreover, would be very greatly lessened by doing away with the general recess.

There is much force in these arguments, but there is something to be said on the other side.

In the first place, children need during their study this short interval of relaxation. It is absolute rest from work, for no healthy child ever thinks of anything during the intermission except how he can get the most play into the few minutes granted. Every teacher knows that the last hour of the school session is a most intolerable and profitless drag if the recess has been omitted. The scholars cannot or will not study or recite during that time, and it is impossible to induce them to give their minds to any labour. The teacher must spend his time trying to amuse them, a task peculiarly hard upon nerves and patience. Of course with the total abolition of the recess comes a much shortened sestion, but it is doubtful, unless the school hours are very much cut down, if as much work can be done, especially in the intermediate grades, as formerly. The
needed relaxation in the midst of work has been sought in an intermission devoted to gymnastic or calisthenic exercises, but this is too much like work to serve the purpose.

The arguments concerning the troubles caused by the recess is answered by the plea that the play-ground is the scene on which the individuality of youth is most likely to develop, and the opportunity given to it cannot wisely be lost. Here if the big boy is tyrannical, the little boys can combine against him. And if the teacher is often harassed by cases of ill-behaviour on the playground, he is compensated by thus learning more about the real character of his pupils in half an hour than he could learn in the routine of school-work in a month.

It is replied to the plea that the recess affords an occasion for the spread of bad morals, that this opportunity is afforded still more abundantly by the streets. That in a well-governed school this exists in but a slight degree, and that the absorption of the children's thoughts in their sports renders their tendency to impart evil ideas, habits or language to their companions to a minimum.

There are good arguments, it will be seen, on both sides. The value of the recess, as affording a short time of absolice relaxation is the strongest argument in its favour. The fact that it is a cause of innumerable disciplinary troubles is the very strongest one against it. The claim that it is 2 source of contamination, some teachers may not admit, but we think the preponderance of evidence seems to show this to be true.

We think the no-recess plan will work better in the higher and the primary schools than in the intermediate department. Little children do not stung enough to need recess, and, besides, it can be made up to them by indoor amusements. With older pupils, too, the recess is hardly needed. We would like to hear from some teacher who had tried the no-recess plan, giving some details of its practical working.-Ex.

## TEACH CHILDREN TO OBSERVE.

Teachers would lighten the labour of instuction and add immeasurably to the value of school experience to the children, if they * ould give a little time to the work of teachtrig children to observe. It is not $a$ difficult work. Children are almost invariably keenejed by nature. They are always eager to see things, and a very little stimulus, applied early enough, will arouse this faculty to most whorous action. Tell the children the old story of eyes and no eyes, of the boy who saw nothing and the boy who saw everything. Exemplify the acute observer in yourself, by often calling their attention to interesting things which you have seen in your daily walks. The world of interest and pleasure which you thus open to them is limitless.
This is what a teacher gives as her experience in this task of teaching children to observe :
When I first began to teach school in the country, I said to a bright boy, one pleasant suring morning, who had a long mile to come to school every day, "Well, my young man, what did you see this morning on your way to school?" "Nothing much, sir." I said, "To-morrow morning I shall ask you the same question." The morning came; and when I called him to my desk you would have been surprised to hear how much he had seen along the road-cattle of all sizes and colours; fowls of almost every variety ; sheep and lambs, horses and oxen; new barns and houses, and old ones; here a tree blown down, and yonder a fine orchard just coming out into full bloom; there a field covered over with corn or wheat; here a broken rail in the fence, there a washout in the road; over yonder 2 pond, alive uith garrulous geese and ducks; here he met a carriage, and there a farm waggon. And not only had he seen all these and many more things in the fields and by the mayside, but looking up he had noticed flocks of blackbirds going north to their summer home. He saw the barn and chimney swallows flying about in every direction; there he had noticed a king-bird making war on the crow, and here a hawk pursuing a little
wren ; yonder he had seen robins flying from tree to tree, and over there the bobolink mingling his morning song with that of the meadow lark. In a word, he had so much to tell me that I had not time before school to hear it all. A new world had sprung up all around him-earth, water, and air were now full of interesting objects to him. Up to this time he had never learned to look and think. Things around him had not changed in number or character, but he had begun to take note of them.-Ex.

## HOME READING.

If parents would know what is the most effective influence to shield their children against the temptations to $\sin$ with which their unwary feet are beset, to guard them from the corrupting tendencies of society, let them be assured that it will be found in good home reading. There has been a general impression among parents that reading, of itself, would keep a boy or girl "out of mischief." This idea is derived from the time when most books were, if not instructive, at least harmless. The mass of evil literature of to-day had then never been dreamed of. It is not enough, now, for parents to know that their children read, they must know what they read.

A recent article in a religious exchange was headed "The Dime Novel Damnation." The forcibleness of this phraseology may be startling to some, but it does not emphasize any too strongly the evil which it condemns. It instanced cases of lads, sons of :espectable parents, who were led, by the influence of the books they read, to commit the most foolish and atrocious deeds. One case is mentioned of a band of boys, children of Christian parents, supposed to have been well brought up, who armed themselves wi:h revolvers and scalping-knives and started for the West, "to fight the Indians." Others had adopted a plan of highway robbery, and robbed their fathers and mothers to enable them to start off on their plundering career.

There are no words too strong to condemn this demoralizing literature. And yet it is furnished to our youth in quantities on every
hand. There are places in every city, which under the guise of news-stands, are depots for ali the vile literary poison in the markel. These places are as harmful to the young as the saloons themselves, but it does not seem possible to close them up, or even check them in their career of mischief. We have laws, more or less enforced, which forbid selling intoxicating liquors or deadly weapons to children or youths; similar laws should be enacted against the sale of literature that is as sure death to the young mind and heart.

The great danger in this matter is found in the fact that it is so generally overlooked, indeed almost wholly forgotten by the parents. Many who in other respects look after their children's welfare and direct their plays and their study, pay no heed whatever to the matter of their reading. They never think that here is a wide-open door through which evils of the most base character may enter unchecked. They never take the trouble to note how much peril to young minds, aye, and young bodies, too, there may be in this reckless and evil reading. The children of to-day learn to read very young, and their tastes in books are very precocious. When the parent thinks they are still being interested and instructed by the boo's of the nursery, they have grown far beyond these, and are deep in the adventures of "Raaring Jack of the Grizzlies," "Wild Bill of the Plains," etc. A very much greater proportion of the young reople of to-day read than formerly; this is shown by the increased amount of juvenile literature that yearly issues from our presses. The publishing of young people's literature is a new and very profitable business. If it were confined to the issue of harmless literature the fact would be one of great promise for the superior intelligence of the next generation. But the profits of the business have brought into it those who, by means of the general education that makes all the children readers, bring to themselves advantages at the cost of demoralization and injury to the unsuspecting and the youthful.

We have said that there is no means of punishing these human vampires, nor yet
any adequate means of checking their career of mischief. There is only one remedy : and that is, that parents occupy the ground with good seed before the emissary of evil arrives to sow the seed of evil and of shame. Par. ents, provide your children with good reading. There is no lack of it now, the market is always overstocked. Let be always interesting as well as instructive. Our children o-day have caught their elders' impatience under sermonizing. Do not inflict on them much of this kind of reading. Give them plenty of stories, by all means. The appetite for stories belongs to all ages, races, and climes. But let the stories be good, pure, ennobling. These will form in the children a taste for good literature, which is the best safeguard against a love for the vulgar and sensational style in which the most of the pirate and Indian tales of the day are written. Have books that are well illustrated, too : all young people love pictures, and it is by means of these that the evil publications referied to largely increase their wicked influence. Take some good children's magazine. Have also good young people's books, and make a practice of giving books to them on birthdays and holidays. These will serve as the germ of a library for the younger ones, and awaken in them a desire tc keep their books from injury or destruction. If a good book does not seem to have taken thold of the minds of the children, for some reason, read it with them, and talk about it, and help them to understand it. This will helf both of you, no doubt.

Parents, note what we have said. Know what your children read, and keep fron them the accursed abomination-the dime novel of blood and thunder. But remember that to keep them from evil books is not all your task, but to supply them with good books, and teach them to love them. Thus, you have raised a barrier between them and some of the most dangerous temptations of life, and insured, for both parents and children, further than any other une act could accomplish, the purity and happiness of your home. -The Present Age.

## WHAT SCIENCE IS DOING FOR MODERN THOUGHT.

O. F . of the most important infliences now at work is doubtless that of science, which is of course as old as human curiosity, and is oniy new in its results. That the effect of the great advance in scientific thought has been to modify considerably most forms of religious belief cannot be denied : and, in spite ot the many attempted reconciliations of the two, it is not difficult to see that some of the leading dogmas of Christianity are doomed. Fortunately, one of the rewards of the freedom that is given to science is a lack of venom in its atlack; and, on the other side, there is an absence of bitterness in those whose opinions t: unavoidably alters. There are, of course, exceptions; modern science has not expelled arrogance from the world, and enlightenment has not wholly driven out bigotry. Yet, in the calmness with which the controversy is carried on, we see how widespread is the belief that dogmas are less essential than the truth which all men alike are seeking. As Prof. Asa Gray puts it: " No sensible person now believes what the most sensible people believed formerly. Settled scientific belief must control religious belief." It is one of the timehonoured jests which the late Lord Beaconsfield thrust into his last novel, that the religion of sensible people is what sensible people never tell. They may not, but their tolerance of new truths and the altered position of ecclesiasticism declare all that need be known.
The present interest in science is distinctly part of the revolutionary movement which demands, with restless curiosity, why everything should be as it is. This is the question that is put to every existing institution, and science often gives a serviceable answer. The answer is a levelling one to all conventionalities, because acience concerns itself only about facts, and it is heard'now because science can only exist where thought is free. Freedom of thought is a powerful solvent, and it is especially destruciive to all the conventionalities which exist hy means of the common agreement that they shall not be examined. We see that in politics the divine
right of kings is called in question, and in the uniform tendency of mortern times towards democracy the assumption of govern. ment by those who are governed. In social matters we perceive a similar movement towards the emancipation of the individual. All knowledge advances from vague generalities to the comprehension of particulars. and as human beings have succeeded in understanding themselves they have thrown aside the convenient habit of dividiag the rest of the world into vast homogeneous classes, and have recognized the dignity and importance of each individual of the race.Popular Science Monthly.

It is reported that already one hundred thousand copies of "Peck's Bad Boy" have been sold, and that the author has received in one year a larger royalty thair was paid to Washington Irving for all his writings. The fact, if it be a fact, should make us blush for American civalization. It seems amazing that an intelligence capable of reading words of three syllables at sight should not be surfeited and disgusted at the end of one chapter of such dreary and pointless platitudes and improbable lies as appear in that book. Such a wretched failure in a weak attempt to be funny was surely never before printed unless perhaps in the weakest effusions of the Dedroit Free Press. The institutions for feeble-minded children must be filling up in this country. $-E x$.

## NORTH HASTINGS UNIFGRM PRO. MOTION EXAMINATIONS.

(Continued from Monthly for Apri!)
COMPOSITION.

1. Write words that mean the opposite of -a coward, humility, smallest, lose, grief, folly, abundant.
2. Write statements correctly each of which shall contain one or more of the following words:-right, ate, reiss, rains, reigns, peace, piece, residence, off, of.
3. Write the full names of five of your schoolmates and their initials.
4. Using "I" as the first word, tell, in short statements. -ivhat you are being exam. incd for, tiro things that you saty on the way to school.
5. Write questions about-a volf, Little Fied Kiding Hood, the ocean, Fiathlehem.
6. Write a statement about-yourself and your mother, yoursiff and your fracher.
7. Use is or are correctly in statements about-France, fragrans, spices, fanes and John, oxen.
8. Use was or were in the following :Tom and bis aunt - put out at this. John and I - in Stirling. The tall chimney - built up.
9. Write answers, in complete sentences, to these questions:-What did John's aunt (lesson on "Try Aguin") wish to teach him and Lucy? In what village was Jesus born? Who is Jesus? In what country is Trenton?

## READING.

Second Reader, page 177-" He now be came very anxious" to " severed the string at one stroke."

## geosraphy and writing.

1. Sketch a map of the County of Hastings and mark on it the tuwnships, the course of the rivers, the completed railways, and the position of Madoc, Stirling, Bridgewater, Trenton, Deseronto, Belleville, and Moira (Hog) Lake.
2. Name the townships in which iron mines are being operated.
3. Define (in complete sentences)-archipelago, sea, promontory, tributary, shore, and bed of a river.

## LITERATURE

1. What is a fable? Name three fables, and tell what each is intended to teach.
2. Explain the following words and phrases :-stalwart, waiting the tide, ponderous, tortoise, gamekeeper, sincerely she repented, hospitable, comfortable mess prepares.
3. The curling waves with awful roar

A little boat assaild ;
And pallid fear's distracting power
O'er all on board prevair'd.

Sate one, the raptain's darling ch.t. Who steadfast irivid the storm. And cheerful, with iomposure s:nice: At danger's threatening form.
(a) Supply other words for those in is ics.
(b) Give the title of the lesson from which this is taken.
(c) What is the lesson intended to teach)
(d) In the first verse the mark 'accurs four times. Exp'ain its use in each case.
(e) With what kind of letter does cain line begin?
4. In what three respects is a crow wiser than a silly boy?
(a) Name Susy's little servants and te:: what they were useful for.
(b) What animals and persons were ask-1 if they had stolen the nest from little Robia Redbreast?
5. Write from memory the four verses of "By-and-by" commencing:-

There's a little mischief-making Elfin, who is ever nigh-

## ARITHMETIC.

1. Find the sum of seventy-nine, eigh: hundred and sixty-three, nine hundred thossand eight hundred and thirty-two, sevea thousand six hundred and fifty.six, fou: thousand and seventy, thirty-four thuusand five hundred and nine, six hundred and thirty-seven.
2. How much must be added to one mi.lion and nine to make three million fout thousand and ninety ?
3. A merchant has $\$ 5649$ in cash and goods worth $\$ 13795$; he owes one mat $\$ 3469$ and another $\$ ; 976$ : how much is be really worth ?
4. There are twelve inches in one foot, how many inches are there in 3679 feet?
5. How many feet in a mile if 79 wills contain 417120 feet ?
6. A man bought a certain number of books for $\$ 5.75$ and sold them at 50 cens each gaining 25 cents ; how many books did he buy?
7. Find the whole cost of 3 yards of co: ton at 12 cents ? yard, 5 yards of cambric a
if cents a yard, 12 yards of tweed at $\$ 3.50$ $a$ yard, and 14 yards of cashmere at 95 cents a yard.
\&. (a) Fixpress by means of Roman numer-als,-350, 275, 25, 164. 97.
( r ) Write in words the following numbers:
$\mathrm{CL}, \mathrm{CD}, \mathrm{Cl}, \mathrm{CX}, \mathrm{XC}$.
8. Define-Figure, Number, Subtraction, Proluct, Dividend.

## EAST MIDDLESEX FKOMOTION EXAMINATIONS.•

Class I.-Part I.

## READING.

From charts, tablets, or books, or from script. Words should be instantly pronounced on being pointed out in any part of tablet, book, or in plain writing on the blackboard. In reading, the phrases should be separated by slight pauses, and the words of the phrases connected intelligently, e.g.:Ann | can get | an egg | for ! she has \| ted hens.

## SPELLING.

Oral spelling of any word in Part I., in print or script, looking at the printed or written word. The order of steps in teaching reading and spelling that seems to be most successful is: To teach a few lespons at first by the word method, then to teach the distinction between words and letters, by having the pupils "count words" and "count letters;" next teach the names ot the letters, first in print, and immediately afterwards in script. From Lescon XII. the sounds of the letters ought to be taught, and the names of the words drawn from the sounds of their letters. Some teachers teach the sounds of the letters before the names. Spelling should be taught both in Part I. and Part II. of the First Book by the use of mord-ouilding, e.g. : Write en on the blackboard, get the sound of en, what letter placed before it will make $m e n ? m$; write $m$. Similarly make $t e n, d e n$, etc. ; ank, r+ank, F+rank, Frank; ar, art, IIart, etc., etc.

[^1]
## IRAWING.

The use of the ruler: drawing straight lines with the ruler in positions to make simple fingrams of three or four lines; rul. ing light parallel lines for writing. The plain outlines of print capitals such as I L HTNZM, etc.

## WRITING.

After the ability to rule lines well is acquired, teach the small script letters in the following order: $m, i, w, m, m, r, p, a, c, r$. s, $c, f, d$. Some children learn writing very much more quickly than others; those who are able may be allowed to finish the small letters in Part I. A pupil should not leave a letier until he makes it correctly in the ruled spaces. Reading the script letters should be taught long before the writing of them.

## ARITHMETIC.

Counting words, letters, objects. Counting oo 100 . Giving instantly the result of one more or one less than any number from I to 100 . Making the figures. Reading and writing numbers to 20.

## COMPOSITION AND OBJRCT LESSONS.

Ans- ering questions on the subject-matter of the reading lessons in simple complete sentences orally. Oral repetition of short complete sentences on numbers, form, size, colour, etc., of objects in the school-room.

## Part II.

## reading.

Reading inteiligently print and script. Proper inflection of easy questions Meanings of phrases and words in the reading lessons.

## SPELLING.

All regular words and ensy phrases in Part 1., orally or from dictation, after the writing of all the small script letters is taught. Capitals may be drawn in outline in dicta. tion lessons until the script capitals are taught. All punctiation marks in the extracts ought to be dictated, nad ought to be copied in transcription exercises.

## WRITING.

Complete the small letters, and take up the capitals in the order of their difficulty. Dictation and tranacription in ruled spaces.

## ARITHMRTIC.

Numeration and notation to 1,000 . Counting by 1 's, $10^{\circ} \mathrm{m}$, $100^{\circ}$ s to 1,000 . Addition and subtraction. Addition table until the figures in columns can be added correctly as rapidly as to average from 2 to 3 seconds per figure. Roman notationas far as the lessons in the book are numbered.

## DRAWING.

Simple figures with straight lines.

## geograpliy.

The directions N. S. E. W. ; and the four iotermediate points.

## COMPOSITION AND OBJECT LESSONS.

Making statiznents about objects ; conversation in complete sentences on subject-matter of the reading lessons. Copying and filling eary elliptical sentences from the black board. Writing a single sentence about objects placed before the pupils' notic.
and to 3rd Class.

## ARITHMETIC.

1. Write in words 105,602 and 100,008 ; write in figures one hundred and thirty-seven thousand, two hundred and twelve; write in words the number between 70,409 and 70,411.
2. Subtract 391,198 from 500,000 ; then 307,791 from 500,000; and then 301,011 from i.e same minuend; and add the three remainders together.
3. If there are $12,937,320,000$ acr-s in 297 blocks of land, how many acres in one block ?
4. Multiply $4,893,67 \mathrm{~s}$ by 84 , using factors, one of which is 7 ; add 923 to the product, and divide the sum by 84 , using the same factors as you used in multiplying. Use the factor 7 first in both operations.
5. Find the sum, difference, product, and quotient of 4,893 and 29. Write the name of each answer.
6. There are 365 days in one year, how many days in 47 years? There are 24 hirun in a day. how many hours in the days in 4: years?
7. How much money would a perenn get for 137 dozen egge at 19 cents per dozen. 65 lbs . of huiter at 23 cents per lb .; and 178 lbs of wool at 34 cents per lb.? I ind total amount.

## COMPOSITION.

1. Write the and and 4 th sentences, puting the right words in the blanks.
(1) The boy is writing.
(2) ——boys-writing.
(3) He was not here to-day.
(4) - they here-?
2. Make four mentences, using only the following wu.ds:-bees, swim, bark, sheep, fishes, dogs, buzz, bleat. Begin each sentence with a capital letter, anc , iace a periox at the end of each sentence.
3. Write a sentence telling how many scholars are in your class to-day.
4. Write a sentence telling to what ciass you may be promoted if you pass this exam. ination.

3rd to 4 th Class.

## COMPOSITION.

1. Give the reason for each of the scren capitals in these two extracts:

The dinder waits and we are tired; Said Gulpin. "So am I."
O Solitude! where are thy charms?
2. State the names and the uses of the three punctuation marks in,
" How could it fail ?" said Midas.
3. State the use of the apostrophe in each of the following examples:-(a) Be spared to manhood's years; (b) His little heart's a fountain pure ; (c) I'll not declare how bright und fair ; (d) We'd rather lose our other two.
4. Exercises from King Midas. Answen must be in complete sentences. (a) Write an explanation of "The Golden Touch." (b) What is your idea of a dungeon? (b) What is meant by a wealthy man? (d) Wha: is a contented man?

5 Write a description of any kind of came played at this school.
Tupica: How many can play at it? How wit playel? In it good exctise? thoany of the players ever get angry ; and if so, for atal causea?
n. Wriea a letter as if to a cousin living in the suuthern States.
Tupucs: How long the winter has been. berp snow. Slerghing-when began and hiw long it lasted. How you have attended whouls this winter. Who your teacher is. What you are doing to day.

## SPELIING.

1. P'ray, accept this little present.
2. They knew neither how to build a cabin. nor catch a deer.

3 The calm treacherous current was bearang them irresistibly to the falls.
4. Flate with fiattery and conceit,

He seeks his royal sire's retreat.
5. Of course, the Indian's gun was level. led in an instant.
6. A perilous adventure once bele!! my brother-in-law, James.
7. He was trudging on steadily, singing cheerfully as be ualked.
8. Perceived the poor victims, and pitied their fall.
9. Camels, indeed, are mentioned in Scrupture, especially in the earlier parts.
10. "And where are they? I pray you tell,"
She answered, "Seven are we;
And two of us at Conway dwell, And two are gone to sea."
11. Nor guess how bright a glory crowns his shining seraph brow,
I know that we shall meet our babe, his mother dear and I,
Where God for aye shall wipe away all tears from every eye.
Whate'er befalls his brethren twain, his bliss can never cease:
Their lot may here be grief and fear, but his is certain peace.

2nd to 3rd Class.
SPELLING.
I. "No one taught me to build my house," aid the crow when they were quiet again.
2. I can easily run in a few minutes the distance the tortolse will require hours to crawl over.
3. "Slow and sure" will often win the day against speed and laziness. No one ought to the afraid of any difficule task; for if he steadily peraceren, he will be aure to succeed.
4. The pony came quietly up to him, and Willie ecized hold of the bridle.
5. Then, as Ilavid had no sword, he leapt upon the huge carcass of the giant, drew his sword out of the sheath and cut off his hend. David became king of Israel, and he wrote and sang many beautiful pralme.
6. "See, mamma!" she cried, "doesn't Lucy look pretty." And she laughed mer. ruly.

> 7. The curling waves with awful roar A little boat assaild:
> And pallid fear's distracting power O'er all on boaid prevail'd.

## 3rd TO 4th Class.

## Reading.

Third Reader, pages 283-4: "The language of this nation," to " we are acquainted."

For reading this extract with correct pronunciation, with a fair degree of fluency, with altention to the marked pauses, but without spirit and without intelligent and correct inflection, pause, and emphasis, give not more than 35 marks. Observe particularly the following points in the reading of those who attempt more than mere correct and fluent pronunciation:-

Emphasis on:-that's, hats, 1. 8 ; found, 1. 9 ; we, l. 12; cat, 1. 18; tiger, 1. 19; other, 1. 22 ; forcigner, l. 24 ; us, we, 1. 25 ; his, 1. 26 ; mames, 1. 29 ; and things, themselves, 1. 30.

Inflection of:-aí, ah! I. 9; no! 1. 15; grease, seeds, 1. 16 ; skins, 1. 17 ; tiser-kined, 1. 19 ; and cat-kind, 1. 20.

Pause after :-cat. 1. 18 ; tiger, 1. 19 ; of, 1. 22 ; forcigner, 1.24 ; do, 1. 26 ; and sensible, 1. 27.

After all have read, direct them with open books before them to write the meaning of :
(1) Uaintelligible to a foreigner: (2) Saluting each other: (3) To riake you sensible. and to 3re ciass.
Second Reader, page 199.200: From "Will you give my bite a lift?" to "head downwarda."
Fixamine the reading an carefully in this class as in the 3 rd Hithertothere has been less uniformity in marking the reading then to any other subject.

> 2nd to 3rd, ANI 3rd TO 4 th.
> wnitinc.

All the small letters, repeated three times joined, in ruled spaces, to marks.

All the capitals, 10 marks.
The ten digits, repeated four times, as for a sum in addition, 5 marks.

The other 25 marks to be judged from the compositions in Class III., and Class II.

> 3rd to 4th Class.
> Grammar.

1. Analyze:
(a) Seven are we.
(b) Two of us at Conway dwell.
(c) And in the cottage churchyard I

Dwell near with my mother.
(d) My stockings there I often knit.
(f) Together round her grave we played, My brother John and I.
(f) How many are you, then?
${ }^{(R)}$ Still the little maid would have ber will.
(k) This one act made that young man's fortune.
(Thre marks for correctly dividing ack sentence inso nown part and predicate, four if the nown part is divided into subjat and adjuncts or complemonts.)
2. Parse all the words except "the" in sentences ( $\delta$ ) and ( $h$ ).
3. Re-write the following sentence, asing pronouns instead of the names of persons : Jane and Mary gave John five cents for John's bunch of flowers; John bad gathered the flowers in the woods for Jave and Mary.

Jane and Mary put the fowers in Jane and Mary's hats.
4. Define: gender, superiative degree. relative pronoun.
5. In the word "highly."
(a) How many syllables are there?
(b) Ifow many letter-mounds?
(d) Wbich of its lefters are nowels?
(d) Which are conmmanta?
6. Give the plural of kwifo and kry : the singular of lidies and sheret: the feminine of herse and a'roite: and the objective of $/$ and whe.
7. Correct the following exprestions (the rea.on is not asked) :
(a) We have went to the beginning of derimals.
(b) They ween us coming.
(d) There the messenger of the councilmen is, selting on a chair.
(d) He was very tired and laid down for a nap.
8. Correct and give goor reason :
(r) He ain't as far in grammar as I.
(f) Them's good apples.
(r) He could juat see the boys heads.
9. What is the difference between?-
(a) He only pretended to believe James. )
(b) He pretended to believe James only. I
(c) He helps Iohn as well as me. \}
( $\cap$ He helps John as well as I.
(e) He is taller than any other bx,y in his class.
(f) He is the tallest boy in his class.
hyGiEnE AND TEMPRRANCE.

1. (a) What difference is there betwees the air as it is iospired (breathed in) and as it is respired (breathed out)?
(b) What produces the change?
(c) What are seme of the injurious effects of breathing your own breath over again, $\alpha$, as in the school-room, breathing the air thal has come off other persons' lungs ?
(d) By what means can a sleeping-room be supplied with freah air, particularly when in is occupied?
2. Trace the changes undergone by the food and its progress from its entrance to the mouth until it supplies strength to the arm.
(1), :f you cannot answer the whole quesinin, answer at many of these parts at you can
1.) What changes take place in colid food belire it reaches the atomach?
(i) Trace food from the stomach to the beat.
1.) After it entern the heart, what must be done with it before it is fit to be ment in:o the artelica?
(d) Where is the blood takem by the atenes?
(f) What is the ase of the vcins?
1) How masy cavities bas the heart, and how is the blood distributed from each?
$\therefore$. (o) In what compounds or under what samex may =icobol be obtained? (Meation hour.)
(s) Mention any uses (two will do) of Neohol in chemistry or medicine.
(1) What effect has alcohol on the reet corpuscles of the blood? On the fibrise of the blood? What may be the results of the effects?
(d) Why doen the partaking of alwobol, notwithstanding the first sensation of warmit. kave the body less protected againat cold?
Or show in what way the warmeth telt after swallowing alcohol is allied to the "hotuche " fell sometimes in ose's fingers after snuw-balling.

## drawing.

1. Draw all the capital letters having staight oblique lines. Make them all the sam: he: -ht, not more than an inch nor leas than half an inct. State in writiog the height you have tried to make them. Draw this kind of letter: N, A.
2. Jraw a window having two sashes, 9 panes of glass $7 \times 9$ in each sash. Show the frame round the window as well as you can. Use the ruler in this drawing chiefly to get the correct proportions of the mashes
3. Dictation drawing:
(a) Draw a equare, side one inch; draw its diagonals; divide both diagoaals into three equal parts, and mark the points of division; through the points neareat the cormers draw four straight lin on, thes making a maller conceantic syane.
(b) On the sides of the first squere (one inch) draw four similar equares ; join the upper right hand angle of the top equare with the lower left hand angle of the left aquare : similarly join all other opposite angles of two squares: complete with inaide conceatric aquares similar to the first aquare.
(c) Continue by jrining to the right one repetition of all the above.

Nos. $t$ and 3 are in he drazer fremhand. and No. 2 wish the rabor. This mper. tring ithefirst, is macto wry easy. There is no paper on drawing for prometion from the 2 and Class this time.

The prescribed lext-books in these sabjects are, in :

Drawing-Walter Smith: Primary Maoual. 90 cents.

Hygieme-Buckton's "'Health in the House." 60 centa.

Trmperance-Dr. Richardeon's Book. 30 ceats. The "Cantor Lectures" and "Abatineace," in paper 25 cls cach, detail the course of experiments upon which his coocluaines is ibe text-bonk wers reached, and cansequently ate found of great benefit in atudying the latter.

> 3id to 4th Class.

GEOGRAPKY.

1. (a) Trace the counse of the River Thames through the County of Middiesex from where the North Brapch enters Nisoouri near St. Mary's and the Soutd Branch enters North Dorchester near Ingersoll to the southwest corner of the county.
(6) Mark on the drawing the townships $\alpha$ Middlesex through or past which the Thames Bows, ootlining the boundarien of ench town. ship.
(c) Mark the city and two villages past which it hows.
(d) Mark the location and mamet of the various railway cromings of the Thames in or on the boundary of Middlesex.
2. (a) Draw the west const of North Amarica. Mark on the coast line the western boundaries of the several coustries and write thair names on the drawing.
(b) Mark the mouths of at least three large rivers flowing into the Pacific.
(i) Locate twc islands and one cape.
3. (a) Draw the north shore of Lake Erie.
(b) Mark on the drawing the six counties and their county-towns correctly located.
4. Name and give the location of two isthmuses, two mountains, and two gulfs.
j. Draw a hemisphere and mark on it, the equator, the ecliptic a meridian, the Tropic of Capricorn, and the Arctic Circle.
5. Define oasis, water-shed, island, channel, peninsula.
6. What and where are Bruce, Brandon, Saguenay, Vermont, Anticosti, Panama, jamaica, Horn, Liverpool, Volga, Sicily, Ganges, New Zealand, Nile, and Sweden?

## ARITHMETIC.

1. Add all the numbers between 30,374 . and chirty thousand three hundred and eightyfour; subtract the sum from one million; multiply the remainder by 144, using factors 12 and 12 ; and divide the product by 99 , using factors.
2. (a) How many strokes will a clock strike in the month of April? (b) How many minutes in the month of April?
3. (a) Two men start from the same place to walk in opposite directions, one walking 3 miles per hour, the other, 4 : how far apart will they be in 7 hours? (b) In how many hours will they be 56 miles apart?
4. Reduce: (a) 3 tons, 4 qrs., 500 lbs ., to
cwt. ; (b) 27,400,012 sq. yds., to sq. inches; (c) 39 pecks, o gals., o qts., to bushels.
5. A strip of land 20 rods wide, is cut off the side of a block $1 \frac{1}{4}$ miles long by 400 rods wide. Into how many lots, each containing 2 acres 80 sq. rods, may the strip be divided?
6. Make a bill of the following items:Mrs. Gale sold Measrs. Arnott \& Co., 13 lbs. 8 oz. of butter @ 22 cents per lb .; 12 lbs . 8 oz. lard @ 10 cents per 1 b . ; 100 eggs at 18 cents per dozen; and bought 2 quarts of syrup @ 80 cents per gallon; 3 lbs. of tea @ 65 cents per lb ; 60 clothes-pins (a) 5 cents a dozen; 4 $\frac{1}{2} \mathrm{lbs}$. of sugar @ 9 lbs . for the dollar; 25 lbs . of rice at @ $\$ 4$ per cwt.; and the balance of what was coming to her in canned fruit at 18 cents per can.
7. Divide the L. C. M. of 26, 39, 130 , 273, by their G. C. M.
8. How often is the continued product of $17,36,55,60$, and 273 contained in $39 \times 8_{4}$ $\times 85 \times 132 \times 240$ ?
9. Find the cost of: (a) 6,731 lbs. of wheat @ $\$ 1.60$ per cwt., or 96 cents per bushel ; (b) 4.837 lbs . of oats @ 40 cents per bushel of 34 lbs.
10. Find the cost of: (a) a pile of wood, 18 ft . long, 4 ft . wide, and 5 ft . high, @ $\$ 4.30$ per cord ; (b) 3,865 ft. of lumber @ $\$ 1200$ per thousand feet.
II. Find the cost of: (a) 379 oz . (a) 14 cents per lb. ; (b) 513 eggs @ 17 cents per doz. ; (c) 378 quarts @ $\$ 1.13$ per gallon.

Nos. 8, 9, 10 and II may be worked by cancellation.

## CONTEMPORARY LITERATURE.

Life and Times of the Right Hon. Sir John A. Macdonald, K.C.B., etc.; by J. E. Collins. Toronto: Rose Publishing Co.

Educational journalism has nothing to do with party politics, but it ought to be concerned in the progress of the nation-in its thought and action-and manifest an interest in public affairs and the records of good citizenship. The publication of this cleverly written work by a Lower Province
man, now a resident of Toronto, is a gratifying indication that there are writers coming to the front who essay to stir the present generation of Canadians with new menial impulses. So much of our literature has been written by men grubbing in old newspapers and quant. ing in uninviting archives, that any enthus iasm in the writer has been dissipated long before the publisher coul ${ }^{\text { }}$ serve the disb up to the reader. No doubt, also, the diff. culties attending publication, in the limited
reading constituency of a colony, have often put an extinguisher on anything like fresh, vigorous thought. The publishers, in the present instance, have had the advantages of $a$ lively, piquant writer, an interesting regime, and all the enthusiasm that not only party allegiance but great personal popularity have brought to the subject of the bingraphy. The jauntiness of the author's style, and the occasional brusquerie of his criticisms, moreover, impart no little charm to the book, and contribute, with the pervading blitheness of the narrative, to one's interest and frequent amusement. Mr. Collin' spontaneity, his springy, marrowy sentences, his impassioned love of country, of nature, and of everything fresh, breezy, and wholesome, are each of them elements of attraction which are all but irsesistible in their influence on the reader. But these qualities in the writer, though they impart a flavour the book, seldom cloud his power of discrimination. True, the author here and there describes events and speaks of his hero in the fervour of partisanship, but he as often takes the bit in his mouth and careers over the paddock of party history with the freedom of an untamed colt. In political memoirs, it is too much the fashion to treat the figures of history with undue partiality. Given the man we admire, then all his actions must be wise and statesmanlike. His sagacity is never at fault, his resources are unfailing, his influence on his time is wholly beneficent, and his memory imperishable. After this fashion, contemporary history is too often written. We are not careful to say that this is what Mr. Collins has not done; but while his sketch of Sir John Macdonald and his times is sympathetic and friendly, the portraiture is nowiere overdrawn, nor has he excluded from his canvas the names of those whose share in the history deserves recognition. In this latter respect the work before us ceases now and then to be a biography of the chief actor on the scene. A glance at the index will show how full is Mr. Collins' canvas, and how extensive is the scope of the work. At times, indeed, we are apt to forget the central figure in the many admirable studies
the author has given us of the leading men of the Dominion. Occasionally, in the case of men politically opposed to Sir John, the author's brush is wielded with vigour, and dipped in the darkest pigments. But the sketches are effective; and they present the men not as stuffed lay-figures, but as actors on the scene, who have entered the arena of conflict, and either make their own exits or are helped off the scene. That in the trying arena of Canadian politics, not 2 few have to be carried from the lists may be taken as a matter of course. The struggle between the political powers of good and evil, is, in the author's hands, nowhere doubtful. Those with whom the writer is in sympathy, as a rule, fare well, while their opponents are wofully worsted. But with this, were we so inclined, we have no desire to quarrel, for the author tells us that he has written " by the light that has been given to him, " and with an earnest desire to tell the "truth." The evidence of this is indeed manifest throughout the book, for not only has Mr. Collins told his story without reserve, and touched the leading characteristics of his subject with decision, but at times his narrative fairly glows with the concentrated flame of conviction. The career of Sir John is followed for over sixty years with enthusiasm and ever-increasing admiration. The more prominent events of his time are described with minuteness, and with an eye to the main bearings of the history, which preserves the proper sense of proportion and prevents the narrative from ever becoming wearisome. In the early part of the book a strain of radicalism crops out in the story, which enlists the sympathy of Liberalism where Liberalism is beneficent. In the closing pages the sentiment presents itself in a pronounced Nationalism, which, likely enough, both political parties will sneer at, though the feeling is obviously dictated by patriotism. Here Cunservatism will no doubt charge the author with rolling in a tub, though his words have a curious convincing force, and the swaying influence of patriotic ardour.

The literary chapter appended to the work rather divides the interest in the subject of
the biography. But here the author is no less at home, and writes of Canadian literature con amore. He bas given us a discrim. inating resumé of our literary forces, though here and there, as in the political narrative, Mr. Collins' own predilections sometimes unfeelingly come into view. His literary judgments, however, are not often at fault ; and, in the case of verse, he has the true poetic instinct, combined with much imaginative and analytic power. The book on the whole is exceedingly creditable to this young author; and its dedication to Prof. Goldwin Smith is a fitting tribute to that gentleman's interest in Canarian literature and the impetu; he has given to literary activity in the Dominion. In the coming years, much will be expected from Mr. Collins' pen, for his present work shows that he is capable of greater achievement and certaln to win higher honours. As a writer, he has something both to learn and to unlearn; but with maturer mind and the subduing effect of age, he will, we venture to think, present himself with increasing acceptance to the reading constituency of Canada.

Arithmetic for Junior Pupils; by Archibald MacMurchy, M.A., and James Brown, M.A. Toronto : Copp, Clark \& Co.
THis is an excellent little work, well suited to the requirements of Public School pupils. Although for junior pupils, it carries the subject beyond the limit table for entrance to

High Schools, by adding simple exercises in Practice, Percentage, Interest, Discount, Ratio, and Square Root. This is certainly an advantage. Many junior pupils who have no opportunity of attending High Schools will thus have an opportunity of obtaining, with. out extra cost, the knowledge of arithmetic which will benefit them in after life. The work is well arranged : the expediency of placing the treatment of Compound Quantities immediately after the Simple Rules may be doubted; but, as this arrangement has been adopted in deference to the opinion of the Public School teachers of the Province, ex. pressed at their last Convention, we do not propose to find fault with it. The theoretical exposition of the subject is well done, and, what we regard as one of the best features of the work, it contains numerous and well. graded examples. In a book for junior pupils, this qualification is one of the utmost importance. Expedition combined with accuracy should be the practical object of an education in arithmetic; and this can be secured only by oonstant practice in solving a varied collection of well-assorted and wellgraded problems. We can safely say that the pupil who masters this book will have a welldigested knowledge of the principles that underlie all arithmetical processes. The mechanical execution of the book reflects credit on Messrs. Copp, Clark \& Co., who have already made a reputation for themselves as the publishers of an excellent series of school manuals.

## EDITORIAL NOTES.

## THE UNIVERSITY AND THE INSTITUTES.

Th\& results of the recent examinations of Toronto University furnish a strong argument against the present system of teaching the work of the First Year in Arts at University College. We find from the class lists that the candidates trained at the St. Catharines and Hamilton Collegiate Institutes, have succeeded in carrying off almost all the principal honors. Both mathematical
scholarships go to these Institutes, and the first position in the year is held by Miss Balmer, who was trained at St. Catharines for the examination. To this young lady have been awarded the scholarship in Moderns, and the second scholarship in General Proficiency. Only a short time ago, Miss Charles, from the same Institute, attainel the Modern Languages and First General Proficiency Scholarship of the same year. And year after year the Hamilton Institute has been equally successful, carrying off
scholarship after scholarship. We do not produce these facts for the purpose of making invidious comparisons, for, no doubt, the work of tuition is carefully attended to at linversity College. What we do wish, however, to impress upor the members of the Senate is, that the Collegiate Institutes are able and willing to undertake the First Year work in Arts. At present we hear a good deal of complaint about the straitened condition of the University finances, and there can be no doubt that University College suffers from chronic impecuniosity. If the University were to drop the First Year work, a good many of its troubles would disappear, and the professors of University College would, no doubt, look upon the change with feelings of satisfaction; for this plan would relieve them of the most irksome portion of their duties, and give them greatly increased opportunities for teaching the higher work of the other years. There can be no doubt either that the masters of our ente: ${ }_{1}$ rising and progressive schools would willingly continue the relegated work. As matters now stand they must take it up for the benefit of comparatively few. The change proposed would entail no extra expense on such schools, and it would be productive of great relief to the Universi.y. Besides, no better scheme could be devised for elevating the stantard of education generally. The advantages of a higher education would in this way be more widely diss:minated; for many whose studies nou end with the junior matriculation examination, would proceed to the end of the first year. Is there such a thing as over-education? For a time men with a university education may deem themselves above certain occupations in life; but this is only a temporary evil. It is sure to right itself.

## COLLEGE COMMENCEMENTS.

Most readers of the Monthly will not require to be reminded by the Convocation Addresses, to be found elsewhere in the present number, that the period of College Commencements is upon us. The prize lists will have already been too well
scanned to note the progress of old pupils to need reminder from us of one of the great educational events of the year. How it has fared with those whose feet have been set on the steep ascents of learning, cannot but be a matter of solicitude to the masters from whom they have passed, and whose preparatory work, whether now recognized by the student or not, must have no little moulding influence on their after-career. Much, of course, will still depend on the character of the work done at collegr, on the ambitions aroused, on the latent powers called into action, as well as on the thoroughness and the fervour of the academic training. In this latter respect, it is not always the best equipped college, or the wealthiest endowment, that will do most for the young collegian, but the amount of enthusiasm and mental vigour thrown into the class-room work, the comprehensiveness and modern thoroughness of the subjects taught, and that happy combination of purnping in and drawing out force, on the part of the professors, that marks the highest teaching aptitude, and has the most inspiriting effect on those taught. In Ontario, we are yet a long way from University Consolidation, though, if the agitation be well-founded that has sprung up against such an institution as the Johns-Hopkins University, which is charged with raising its standard so high that only the few can be educated, and not the many, then a great National University, or the centralization of a number of colleges with an Arts course for a!l, is not wholly to be desired. But on the other hand, we are in some danger of forgetting that we are as yet a sparse and poor people; and the multiplication of colleges, especially of denominational institutions scattered over the Province, with their necessarily limited Arts departments, is not the act of the highest wisdom, however ardently denominational pride makes effort to sustain them. That they are sustained, and pluckily sustained, is of course to their credit; and rivaliy here is perhaps seen in its fairest guise. Could the Utopian dream be realized of a fusion of the sects, as we have seen and are seeing the union of the various bodies of more than one denomination, then University Consolidation
would not be far off. It is the end of endu. cation to liberalize thought and opinion and to broaden the views of all who come within the reach of its influence. The presence at the recent Convocation of Queen's University of a Roman Catholic prelate and of the representative heads of other communions, is a significant circumstance, and speaks with a thousand tongues for the liberality of spirit, as well as for the efficiency of the work, of Principal Grant and his colleagues. The remarkable growth of Queen's, and the scarcely less remarkable work of Victoria, and the zeal and efficiency of the faculties of Wycliffe and Trinity Colleges, may well incite the council of Toronto University to keep the latter institution in the van of academical progress, and, in reality, to make it the coping stone of our provincial educational system. No friend of University College will, we trust, fail to respond to the appeal in its behalf, so ably made the other day by Mr. Vice-Chancellor Mulock.

## ENGLISH LITERATURE LECTURE. SHIPS.

Mr. Lesife Stephen, we observe, has just been installed in the Chair of English Literature in the University of Cambridge. The appointment to this important professorship of so cultured a writer and able a critic is not only a compliment to that guild of great modern writers of English prose, of whom Mr. Leslie Stephen is one of the chief, but it introduces to the College Halls on the Cam a vigorous thinker and an accomplished litterateur, whose influence must be in the highest degree stimulating, and whose work will bear no trace of pedantry or smell of rust. Among Mr. Stephen's writings are "Hours in a Library," a collection of appreciative biographies of English authors, the monographs on " Johnson," "Pope," and "Swift," in Mr. Morley's Men of Letters Series, and a "History of English Thought in the Eighteenth Century," the latter rather rationalistic, however, in its tendency. Now that English Literature is beginning to take its rightful place in the educational institutions of Canada, of what service would it not
be to have in our University Chairs a few modenn men of culture and enthusiasm in letters? This is nowadays an imperinus want; and we could name three or fous Canadian scholars whuse services should be instantly had, if not as additional and permanently appointed Professors of English Literature in our Colleges, then as occasional lecturers and exponents of the subject. Eng. lish Literature has of late years had the benefit of so much critical thought and ex. pository skill, and so many modern minds have enriched the field of letters by their research and analytic talent, that the subject presents new worlds of thought and interest to the student which have scarcely hitherto been dreamt of. Hence the need oi wellequipped lecturers and of modern, sympa. thetic expositors.

## " FALSE HOPES."

Professor Goldwin Smith has done good service in these anarchic times in writing this Sooklet on the Socialistic and semiSocialistic fallacies of the day. The work is a protest against the dangerous doctrines and insidious teaching of modern writers on social and industrial questions, and is a calmly reasoned but very effective reply to these heresies. The subjects dealt with are Communism and other menaces to society, Nationalization of Land, Co-operation, the Currency, Protection, etc., and the moial deduced is, that there is no royal road to fortune, which will give security to the citizen and stability to the State, save by the old-fashioned one of honest toil allied to thrift and regard for your neighbour. The brief paper should be read by every one, and its popular form and cheapuess make this possible. [Lovell's Library, New York; ihe Toronto News Co., and all news dealers.]

## ONTARIO TEACHERS' ASSOCIA. TION.

THE annual convention of the above association is announced to be held at Toronto, on the 14th of August next. The usual 'rogramme of papers to be brought before the general association and the separate sections
has been issued, and the meeting promises to be of more than average interest. The evening addresses will be delivered by Prof. Marshall, of Queen's University, Dr. Oldright, of Toronto, and the president, Mr. Archibald MacMurchy, M.A. We notice in the programme a paper by Mr. John E. $B_{\text {ryant, M.A., of Galt, on " The advisability }}$ of a change in the administration of the School Law, by the appointment of a Chief Superintendent of Education and a Council of Public Instruction, in lieu of a Minister of Education." Here is a subject of vital interest to education and to the teachers of the Province, and its discussion should be freely and dispassionately entered upon, with the object of securing a frank and unreserved opinion from each member of the profession, on a matter concerning its present weal and future prosperity. We have already expressed our own views, and we should like to hear the judgment of the profession on the question. The growing conviction of the country seems to be in favour of a speedy return to the old system; and, apart from all political considerations, it would appear to be the almost universal opinion that education has everything to gain by disencumbering itself of the political ministership, and permanently placing itself under competent and unpartisan administration.

## RESIDENCES FOR TEACHERS.

$\mathrm{W}_{\mathrm{E}}$ are in receipt of a municipal blue-book for the County of Halton, containing the annual School Report of the Inspector, Mr . R. Little. The Report is interesting in many particulars, and its arrangement and detail are characteristic of the intelligent zeal of this painstaking school officer.

We make a quotation from the Report on a matter we should like well to see brought to the notice of trustees throughout the Province. What is home without a wife and little ones is the heart-exclamation of many a worker. Mr. Little's concern would lead him rather to exclaim on behalf of the teacher-What is a ${ }^{\text {sch}}$ chool appoinment worth without a profes. sional residence! Here are his remarks. May trustees ponder them!
" The question of providing suitable te:chers' residences has not apparently received the attention of trustees and ratepayers. Only two have yet been provided; one in Nassagaweya and one in Acton. As matters now stand, married teachers are almost forced out of the rural sections, from inability to get a house in which to live. Of the nineleen married teachers employed last year, five taught in towns or incorporated villages, four in the smaller villages, two taught in rural sections but lived in the adjoining town or village, two others lived in homes of their own, and six lived in the sections in which they taught. Not more than one section in ten can provide a house for a married teacher. I hope the day will soon come when in the larger and wealthier sections the erection of a teacher's residence will be regarded as favourably as the erection of a manse or parsonage. I believe the establishing of suitable residences for teachers would advance the cause of education. Experienced teachers would be recained in the profession; the evils resulting from frequent changes of teachers would be greatly diminished; and in the end the cost of education would be reduced."

## THE CHOICE OF NEW READERS.

For the past two or three years the Ontario Department of Education has in one way or another expressed its desire that there should be greater prominence given to the study of English in the schools of the Province. This new departure, all will admit, shows wisdom, unless teaching in this country is to become less practical than it ought, and cease altogether to be an intellectual occupation. Influenced by the views of the Department, and acting in great measure upon the advice and with the concurrence of the Minister of Education, the Canada Publishing Company projected a series of Reading Books which should aid, in the most efficient manner, the cultivation of literary taste and inculcate love for reading. Among the chief requisites of the series it was sought that the Reading Books should be (I) thoroughly national in character, (2) that, in the selection of the lessons, interest and literary form should be as much considered as instruction and (3) that the books should be constructed so as to give all practical aid, to the master as well as to the pupil, in acquiring a technical knowledge of English
and in extending the taste for pure literature. he lask the Canada Publishing Co. set isell has now been completed, and in the the "Ruyal Canadian Readers." the series we briefly referred to last month, the educationnts of tise Province will find a set of text books of inestimable value to the profession and of the first importance to the jouth of the country. In our advertising pages it will be seen how the series is being received both by individual teachers who have examined its various volumes, and by gatherings of the profession at recent Conventions, where committees have reported upon the books. The seri -c has been described as the manifest, uduct of men of cultivated and disciplined intellect, in whom the practical has been the guiding motive, and whose acquaintance with Canadian schools and knowledge of the wantt of pupit and teacher, are intimate and extensive. The Department, we judge, will be unreasonably sanguine, and we venture to think will be grievously disappointed, if it look elsewhere for a set of Reading Books more carefully planned, or more intelligently and successfully adapted than this, for use in the schools of the Province. From all sides comes the cry for one set, instead of a plurality, of new authorized reailers; and there will be a wide gulf between the attitude of the Department on this question and the reasonable demands of the profession if - gard is not had to this wise and politic preference. The argument for but one set of Keaders, on the score of economy, and in the interest of morals, as well as of the schools, in facilitating examinations, etc., is so obvious that it needs scarcely to be dwelt upon. How vitally important, then, is it that the series to be adopted for general use throughout the Province should, as far as possible, possess not only every merit that can distınguish a series of Reading Books in these modern days, but that, professionally, it should be to the teacher a mine of instruc. tion and guidance in all that is required of him in imparting a thorough Elementary English Education. An examination of the "Ruyal Canadian Readers" will prove how satisfactorily they meet this want.

## A NONDESCRIPT SERIES.

If Euclid had refused to communicate his ideas upon Geometry, and Arabic scholars had kept their hands from Algebraic thimberigging with the alphabet, the teaching of English in the Province might now have been in a less backward condition, and we might sooner have had a really good set of scho ol Reading Books. From an article in another column the profession will learn, however, that a series of Readers of the highest merit has at last appeared, in remive the discredit from Education in Ontario, of being behind other communities in the possession of Reading Books that shall first be good as literature and then good in their teaching power. The demand, in the present case, has brought .Jrth what was wanted, and authorization of the series we refer to cannot, we imagine, be long delayed. An. other house last year rushed hotly into the field with an Old World series for which it thought, by the simple process of relabel. ling, to secure a monopoly of the market. On the appearance of that series, we had something to say of its utter unsuitableness for use in Canadian Schools. Since then, though the books have been subjected to some doctoring, and though all the powers of good and evil have been going to and fro in the land soliciting endorsement of the series, the profession naturally shrink from seeking authorization for it, while in matter and form it is so little of an improvement upon the present series, shortly to be discarded. Should this series fiid any favour, it must be with those who have grown tulerant of dreary mediocrity, and whose love for respectable platitude dulls their sense of fitness of matter, and blinds the critical eye to the proprieties of grammar and the niceties of literary form. In regard to matter, the selection of the lessons is notoriously bad; at least four-fifths of the whole series is foreign in interest to Canadian youth, and much is of that nondescript kind, which is neither fish nor fowl, nor good red herring. In proof of this, we might instance the lessons on Natural History in the Fourth lbook, which abound in errors and foolish ....ements, while the literary form is such as
would hopelessly demoralize every student of pure Einglist. Throughout the books, there ire pages of impenitent grammar and a shoreless sea of incorrigible orthography and uncontrite syllabicatirn. In the process of adaplation, from " English Readers" to "Canadian," the grossest liberties have been taken with the text, and the most lullicrous patch.work is the result. Yawning chiniks here and there disclose the interior rents, and unassimilated matter is scattered alnut as if Stromboli had refused the uncongemal stomachful, and had incontinently beiched it forth. While the Natural History lessons we have referred to are poor and threadbare, their writers, it must be confewed, are entitled to high place in the rank; of original observers. The goat, the beaver, and the ass, are credited with a witer range of intelligence than they are generally supposed to possess, and with a -kill in performing feats, which must be new; to those who know anything of the hathts of these unassuming mammals. To real these le,sons one would suppose that they had been written by Mark Twain or Alitmus Ward, and were intended for the cole perusal of incredulous youth, and for the instruction of minds preternaturally guilelesi. Such a wicked mixture of platitude and howing, it would be difficult to parallel, and for any sane child's reading, it would be a most trying educational performance.

A, was the case with our criticism on the "Practical Speller," many of the defects we pornted out in our previous notice of Gage's "('anadian Readers," (see the Monthly for April 1882,) have in later editions been remedied, and some of the more flagrant iriaccuracies corrected. The latest issues of the Readers, however, perpetuate blunders so gross and misleading that their presenta. twin to the schools would be an affront to education, and an everlasting stumbling. block to the scholar. There is no call to use disparaging epithets towards the series, or to say an unkind word against its publishers. Mcisrs. Gage's enterprise, in the present case, has not been tempered by good judgment or discretion. The books, on almost every page, voice their own condemnation; and
we can scarcely conceive of their being seriously offered for the approval of Canadian school authorities, whose desire is for but one now set of readers, and that the best. Adaptations are always perilous experiments, and the publishers, in the present instance, had better have let the series remain "English." The atiempt to Canadianize it has been a sorry failure, and the only successful naturalization for the books will be to begin with a new birth. Take up any of the series at random, and five minutes will satisfy the examiner that they are not the books for this hemisphere, nor can they, short of the most radical charges, be made to suit the schools of Canada. A glance at he Fifth Reader will satisfy anyone of this. Of its 384 pages you go over 350 before you reach any native matter. In all these pages, throughout lessons that deal with history, biography, science, travels, etc., there is no reference to Canada, or the circumstances or wants of its people. On the contrary, the references are often most misleading, ard sometimes utterly unintelligible. Take, for instance, the statement on page 13, where, in speaking of earthquakes, it is remarked that "even in our own island." (here, Great Britain), "near Perth, a year seldom passes without a shock." On the same page, in the notes on the lesson, the pupil is told (as previously cited by us) that the Pyramids cover "as much ground as Lincoln's Inn Fields"-an explauation by no means helpful to a Canadian youth. In the same lesson, the pupil meets this exclamatory sentence, " Look at our chalk cliffs, which once extended across the Chanoel;" on page 128, he will learn that apples, in the olden time, are said to have cost 1 s . per 100, or about 12 s . of our money ;" on p. 162, he meets the statment that " wee have no mcuntains which are 5,000 feet high;" and on p. 188, he is told that, during the Middle Ages, Rome "sank to the sise of a fifth-rate English town." Again, take the lesson on Temperance (pp. 258-9) where the pupil will read that "we spend 150 millions of pounds a year on alcoholic drinks," and that "we have probably about 500 million pounds invested in the trade "a reference to the social condition of Britain,
not in that of Canada. The currency throughout these lessons, we need haritly say, is Finglish, as in the following, on p . 2 sit - " The really grand Svez Canal, which cost upwarls of Ci6.000,000,"-cheap, we may add, for the superlatives in the sentence!

Examples of inconsistency in statements made in the text are also numerous, the result of patch-work in the lessons, euch as that on "A Voyage Round the World." where, on $p$. 343 , reference is made $t$ " "at home again in England," while two pages further on the pupil reads of "the magnifi. cent chain (of lakes) which divides our country from the United States." The patch-work is also objectionably manifest in the two forms of spelling occurring in the book, where, in the case of the original lessons, words such as honour, faveourite, colour, neighbour, harbour, recogoize, etc., are spelt in the English form, and in the interpolated lessons the speling conforms to American models.

The want of proper editorial work or the incorporated matter is also a grave defect in the series. The speech of Sir John Macdonald on "Canadian Confederaticn," for intance, has no introductory note to indicate when it was delivered, or to point to the crisis in our history which brought Confederation about. In the absence of this, the pupil reads (see p. 363), "We know that the United States at this moment are engaged in a war of enormous dimensions," etc.; and on p. 336, he will gather that it is but tiventy-five years since the union between Upper and Lower Canada! The lesson on "Winnipeg," sund wiched in at the close of the book, without note or comment, is another evidence of want of editorial supervision, as the lesson itself is a specimen of atrocious English. The best of editors, we know, are not always at their best, but surely Professor Meiklejohn is not resDonsible for more than 2 few pages of this book. For the meaning of the sentence at the bottom of p. 259, we must ask Mr. Gage mercifully to be his nwn interpreter:-"What is not seen is much more, and is much more terrible." The sentence, italics and all, is as it appears in the text; and to us there are fifty of like mystery.

The Fourth Book of the Gage Series, is the only one that may be said to be in any degree Canadian ; but the book is wretchedly
edited, and the work carelesoly done. It is, moreover, hadly graded, the opening lessun (lard Infferin's) being more blted for the close of the book. Its old country origin alos betray a iteclf, as, on $p$. 107, where "finces in this country" evident!y refers to England. On p. 17, we oliserve that the text was bieen revised since our previous conticism on the look. Here the sintement was made that leavers used their tails as trowels in builis. ing, but the question, in p. 21, is retained, "How do ther (beavers) use their tails in building?" The questions on the lesson. entitled " Yussouf," p. 107, refer to matier which hae been remived from the work! Orthographical eccentricties, broken letters, and every variety of spelling, are to be met with all through the book, while errors of taste (see pp. 135 and $13^{\text {B }}$ ) are numerous and offensive. Instances of liad grammar, and inclegant English, confront one on almost every page. In this respect, the text of the lessons, the notes and questions, the elocutionary hints, and the hographical sketches in the appendix, are alik = disgraceful.
Once let the hand of incompelency begin its work, and progress becomes degeneracy. The Second and Third Books of the series are no improvement over those we have dealt with. Little of the matter in either book has any Canadian bearing, and what there :s of a historical character must be unmeaning to the child without intreductions or ample noter in explanation. Most of the poetical selections are objectionable for the same reason, that they appear without note or comment. Some of those in the Second Book are incomprehensible to a child, being purely subjective, and their difficult words and phrases unexplained. In the Primer, It is stated, that "only one power of single letters is used in the lessons"- statement that is belied on every page, if it is not to be read as a sally of wit.

But a truce to this war upon incompetence and charlatanry. Yet are we called by our office to have an eye on the literature that is endeavoured to be palmed off on the Province in the name of education. The experience hitherto of the schools does not assure us that the authorizing body in connection with our educational system has always discreetly and impartially done its duty. Hence the need of watchfulness, and whatever aid independent journalism can render. Some people have a poetic way of regarding literary criticism. Its function is not always to turn on sprays of rose-water, or to fire blank cartridge salutes on a gala day. Occasiuns sometimes arise for the use of the mortar and the siege-gun. Criticism that is too delicate to take cognizance of the threatened perpetration of a great wrong had better get out of the way.


[^0]:    *See page 5 53.-Ed. C.E.M.

[^1]:    *By courtery of Mr. J. Dearness, I.P.S., London.

