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THE CANADA
EDUCATIONAL MONTHLY
AND SCHOOL MAGAZINE.

OCTOBER, 1886.

ADDRESS TO THE ONTARIO TEACHERS' ASSOCIATION.

BY SAMUEL MACALISTER.

LADIES AND GENTLEMEN,—

LET my first words to you this evening be those of thanks for the honour you have done me by making me President of the Ontario Teachers' Association. It would be the shallowest hypocrisy on my part to pretend that I do not feel proud of a position which is the highest that it lies in the power of my fellow-teachers to bestow. I must not forget, however, that with the honour comes the responsibility of seeing that the work of this Convention is conducted to a successful issue, and I trust I shall have your forbearance, as well as your support, in any efforts I may make towards this end.

Let us keep in mind that we assemble here as a deliberative body, with the purpose of bringing our opinions to bear upon the general interests of education in the country, and of those engaged in it. To do this successfully we must reduce those opinions to a focus, though they may

be as varied as the colours of the rainbow.

The programmes of business which the Board of Directors, and the Committees of the High School, Public School, and Inspectors' Sections have prepared, will make the three days of our meeting very busy ones. I am sure they will be pleasant, and I trust they will be profitable, so that we may be able to look back to the Convention of 1886 as one in which valuable progress was made in the cause which we all have so much at heart.

I propose to pass in review some of the important reforms that have had their origin in the deliberations of these Conventions, and I do this that we may be encouraged and stimulated in our work, and that some of our younger fellow-workers, who have not yet borne the burden and heat of the day, may be convinced of the utility of our meetings, which, strange to say, they are disposed to question.

When this Association began its labours one of the first things it attacked was the method of granting certificates to teachers. There were then as many centres of examination for certificates as there were counties, and the County Boards had the power of granting all grades of certificates, from the lowest to the highest, with this restriction, that they were legal only in the county in which they were granted, while those granted by the Normal School were provincial in their character. It will be at once perceived that there could be no fixed standard for County Board certificates, so long as they varied with the character of the Board which granted them, and indeed one of the facts which used to be stated in argument against this system was, that while in some counties the standard for first class certificates was as high as that at the Normal School, in adjoining counties it was almost as low as that for third class Provincial certificates. As early as 1862 the crusade against this defective plan of certifying teachers began, and it continued year after year, with concentrated effort, until a Central Board of Examiners was at last appointed, and a plan of granting certificates, upon which the present one is based, was inaugurated. By this the two higher grades of certificates were made Provincial, and tenable during good behaviour, whether the recipients were trained at the Normal School or not, the only requisite, as a set-off to Normal School training, being experience in teaching.

This is not the only matter that was then taken up. It was a subject of complaint that the inspection of schools was doing very little to further educational progress. The inspectors, or local superintendents, as they were then called, were not, as a rule, men connected with education, but consisted of a motley company of lawyers, doctors, clergymen, etc.,

who in many cases used this position to eke out a scanty livelihood. It would be quite wrong to say that there were not a number of men among them who did excellent work. Indeed, the records of this Association, and the presence still amongst us of men who served the country as well when local superintendents, as they do now as inspectors, prove the contrary. Nevertheless, as a rule, the work of inspection was done in a perfunctory manner, and when the Ontario Teachers' Association began to call for a reform in the method of granting certificates, it felt it necessary to agitate for a reform in the inspectorate also; its main contention being that every inspector should be a practical teacher. This point was at last conceded, and reform both in the method of granting certificates and in the qualifications of inspectors were inaugurated at the same time. The result of requiring inspectors to be practical teachers is seen in the immense improvement of our schools to-day. Had the Association secured no other reforms than these two, it would be entitled to our gratitude and the gratitude of the country at large, for the improvement produced in the standing of the teacher in the one case, and the immense benefit conferred upon public school education in the other.

It may surprise some of our younger members to know that when the Ontario Teachers' Association was inaugurated, if we except the Normal School, there was no public provision for the education of girls beyond what the public schools afforded, and of course in the Normal School the training was of a special character. Girls had no legal standing in our Grammar Schools, as they were then called, nor, need I say, in our universities. As early as 1865 the Association took up the question of the higher education of girls; in 1867 it was

again discussed, and a committee was appointed to press the subject upon the attention of the Chief Superintendent and the Council of Public Instruction, and to take such other steps as they might deem advisable to carry out the wishes of the Association on the subject-

In 1868 the address of the President, Mr McCabe, was specially devoted to this subject, and the Board of Directors brought forward a series of resolutions which, among other things, stated:—"That the course of studies for girls and boys in our higher schools should be substantially the same. That the non-recognition of girls as pupils of our Grammar Schools is contrary to the wishes of the great majority of the people," and "That the legal recognition of girls as Grammar School pupils is calculated to further the real educational interests of the country." These were adopted, and a committee was appointed "to bring before the Legislature of Ontario the subject of the higher education of girls in accordance with the views of this Association." The agitation was continued until the Legislature put the education of girls upon the same basis as that of boys in our High Schools. In the discussion of this question I need hardly say the High School members of our Association took a leading part, and who will question but that it has been largely owing to their endeavours in the High School Section that the doors of our universities have since been opened to women? It is a fitting sequel to these remarks to state, that this year for the first time we have a girl in the person of Miss Balmer, who, having passed regularly through our provincial course of education, from the Public to High School, and from the High School to the University, has carried off at her graduation the highest honors against all competitors.

In a country like ours, where the

support of the public schools is compulsory upon the inhabitants, it is right to suppose that the attendance of children should also be made compulsory. This was not done when our system of education was established, and this Association was not slow in taking the matter up, with the desire to have it done. In 1867 the subject of compulsory education was brought before the Association by a paper read by the Rev. Mr. Porter, who was then Superintendent of Common Schools for Toronto. In 1868 a resolution was passed, stating "That the rule of compulsory attendance ought to be adopted, as it is at once a just and logical sequence of our system of education, and the only way by which the great evils of irregular and non-attendance of children at school can be abated." In 1871 the principle of compulsory education was recognized by the Legislature in the Act that was passed that year. In anticipation of this the following resolution was adopted at our meeting in 1869: "That in the event of the principle of compulsory education being adopted by the Legislature, the establishment of Industrial Schools will be absolutely necessary to receive vagrant children and incorrigibles," Though our law now requires attendance at some school for one hundred and ten days in each year, on the part of all children from seven to thirteen years of age, unless prevented by sickness or any other reasonable cause, we are still troubled with the evils of irregular and non-attendance, and no industrial school has been established by the State to receive vagrant children and incorrigibles. Now why is this? The fault is certainly not in the law, for all the machinery needed to enforce the compulsory clause is provided. Trustees are empowered to levy a rate of one dollar per month upon the parent or guardian of each child kept from school in

violation of the law, or the culprit may be summoned before a magistrate, who is empowered to fine him five dollars for the first offence and double that amount for each subsequent offence. In proof of the fact that we are still troubled with the evils of irregular and non-attendance, we need only refer to the last report of the Minister of Education. There we find that the registered attendance for 1884 was 466,917, and the average attendance 221,861, or not quite forty-eight per cent. of those registered. This means that not more than forty eight scholars out of every hundred attended school regularly during that year. One other fact more directly bearing upon the subject before us has yet to be stated; no less than 90,959 children between the ages of seven and thirteen years, or about twenty per cent. of those registered, were returned as not attending school for the minimum number of days required by law. Can we wonder that in a very intelligent and appreciative article upon our school system which appeared recently in the *English Schoolmaster*, our low rate of average attendance should be the subject of remark. I am quite aware that the circumstances of the country are against as regular attendance of pupils as can be secured in most European countries; but why should it be any lower than in Australia, where it ranges from seventy-three per cent. in Western Australia to fifty-seven in New South Wales? In Victoria, whose population and number of persons to the square mile corresponds most closely with our own, the percentage of average attendance is sixty-four. Evidently the law of compulsory education is not a dead letter there, as it is allowed to be with us. I have not yet heard of an instance in which any Board of Trustees *was* tried to enforce the law by either levying the rate they are

empowered to do upon negligent parents or guardians, or by bringing them before a magistrate. It would be interesting to know what proportion of adults among those who have received their education solely at our public schools can write a letter decently, and read a newspaper paragraph intelligently. I fear it would not be found to be a large one.

If there is irregular attendance at school, there is defective education, and defective education is sure to show itself in after life. Why then is the compulsory part of our school law not put in force? I fear that while some boards of trustees are ignorant of it, a good many more ignore it. I am quite aware that a rigid enforcement of it would work grievous wrong in a good many cases. Take for instance that of this city. For many years past the persistent efforts of our Board of Public School Trustees have not been able to meet the demands for school accommodation owing to our rapid increase of population. These efforts have been hampered, too, by that vexatious clause in our school law which gives municipal councils control over the expenditure for school buildings, etc. In view of these difficulties it would have been impossible to have carried out the compulsory law in this city, and other boards may have had similar obstacles to contend with. But I am sure with the majority of school corporations throughout the country the enforcement of school attendance would not be an impossible, and with many of them, not a hard task. If a penalty of some kind were imposed upon negligent trustees, as well as upon negligent parents, our average attendance would be improved, and two other good results would follow. In the first place children would get a better education, and thus would be better prepared for performing the duties of citizenship afterwards, and

in the second, the average cost per pupil would be lessened. It is one of the anomalies of our school system that notwithstanding the lower salaries paid to teachers in our rural schools, the cost for education in those schools is higher than it is either in cities or towns. This is owing to their low rate of attendance. During some parts of the year attendance in country schools is almost nominal; were regular attendance insisted upon this anomaly would disappear.

Emerson has said in his epigrammatic way, that it is better to be unborn than untaught, and no state system of education can be considered complete that does not make provision for that large class of our juvenile population which comes under the head of vagrants and incorrigibles. For such as these special schools must be provided, and this is a matter which has not escaped the attention of this Association. In 1868 a motion was passed in favour of establishing industrial schools for training our vagrant juvenile population. In 1870 the motion I have already read to you, which formed part of a report of a committee, was adopted. In 1873 I had the honour of reading a paper upon the subject, the discussion upon which resulted in the appointment of a committee "to wait upon the Government, and impress upon them the necessity of establishing one or more such schools in this Province."

A standing committee upon Industrial Schools was subsequently appointed, but without any effectual result. Enough has been said however, to show the interest that has been taken in this subject in past years. The fact that the Government has paid no attention to it is a sufficient reason for us still to keep the subject before us. Professor Huxley has well said that no plan of national education is complete unless it begins in

the gutter and ends in the university. Ours certainly ends in the right place, but where does it begin? Certainly not so low down as the gutter, and yet we have a large number of children in our midst who are shown by the report of the Minister of Education to be attending no school whatever—children either without parents, or whose parents are incompetent to manage them, and who eventually grow up to be a means of supply for our criminal population. The following wise words of an eminent statesman and scholar, who showed himself to be far in advance of his time, I mean Sir Thomas More, are very well worthy of being weighed in connection with this subject. "If you allow your people to be badly taught, their morals to be corrupted from childhood, and then when they are men, punish them for the very crimes to which they have been trained in childhood, what is this but to make thieves, and then to punish them." What has our Legislature done to secure the proper training of these children. Nothing, further than passing an act to sanction the establishment of Industrial Schools. There, not only the Legislature but the Government seem to think that their duty ends, and yet I know of no duty that more legitimately belongs to the government of a country than the proper care of these neglected children. I have often thought that if a man like Goldsmith's Citizen of the World visited this country, he would be as much amused with the inconsistencies in the management of our public affairs as Goldsmith's character was with those of the Man in Black. He would find that while our Legislature shows its benevolent solicitude not only for the insane, but for idiots, for the deaf and dumb, and for the blind by providing asylums for them, it shows itself totally indifferent to the welfare of those neglected boys and

girls who infest our streets and lanes, and whom it might save from a life of crime, and make useful members of the community, by a judicious expen-

diture of money which would not amount to so much as has to be spent upon them afterwards as criminals.

(To be continued.)

SCHOOL BOYS AND GIRLS—OUR FUTURE MEN AND WOMEN.

THE reading of a paper by Miss Stewart on Inequality of the Sexes, published in the last number of the magazine, suggested the writing of this one.

There is evidently a mental difference in the sexes, as well as a physical one; and that the one difference as much as the other was designed by the unerring wisdom of Him, who fitted each for a peculiar lot in life, seems quite reasonable to believe.

The question then remains for us as teachers:—How far should this mental difference be recognized in the school room?

The aim of all earnest teachers is to do what they can in training and fitting their pupils to become good citizens; that is, manly men, and womanly women, ready to fulfil successfully the duties devolving on them, when they shall enter the domains of manhood and womanhood. The departments to be filled by each sex are quite distinct and clearly defined in our own, as well as all other civilized and christianized lands. In the words of Mrs. Sigourney:—"The toils, the perils and the stormy honours of the outer life devolve on the one; and the cares, the burdens and the exquisite harmonies of the inner life are reserved for the other." Which sex is the superior? is a question I leave to others to debate; for though I admire Miss Stewart's loyalty to her own sex in claiming for it mental superiority, yet I find it difficult to overlook the fact that the leaders in science, art and literature, have all been men. And

yet I do not estimate lightly the ability of my own sex. It is known that some of the strongest forces in nature work silently and imperceptibly; and to such forces may be compared the work and influence of women. Unseen beyond the quiet radius of their homes, their work may seem trivial; but the biographies of eminent men nearly all give to the mothers a pæan of praise for lessons inculcated, stimulus given and earnest thoughts inspired, while at the home fireside. Perhaps the strength and effect of women's work are beyond estimation. The mental capacity of the sexes appears so different as to be difficult of comparison. Women seem capable of lightly culling from each of a great range of subjects, to a depth required for practical use in their varied round of duties. Men grasp a few subjects firmly, concentrate their minds upon them, follow them up, and make them subservient to their life work. While a man chooses one of the various callings or professions and makes it the business of his life, a woman, in order to meet successfully her varied domestic duties, must know something of, and be something of, each and all of them. She must know something of medicine, and be skilled in nursing the sick; she must be a lawyer, or rather a judge, in so far as to be able to decide with justice the cases of dispute that will arise among the little belligerents under her jurisdiction; she must possess something of the merchant's art, so as to be able to purchase for her household with prudence and

taste ; and so with many others of the various callings and professions.

Then how far should this mental difference, and the result to be obtained, influence our work in the school room ? The course of study prescribed for our public and high schools seems as well adapted to, and effective for the girls as the boys. The girls may not, as a rule, distinguish themselves in the higher mathematics, nor take to them as kindly as the boys do ; yet the mental discipline, that the study of these branches entails, must be of lasting benefit to them. But there is little in any of the prescribed studies, with the exception of literature, to develop domestic tastes, or give that variety of knowledge that girls require to have. I speak of girls particularly, for the boys, I think, have a much straighter and more favourable road than the girls have, over which to travel to grown-up land. And there is no subject on the list that could be prudently left out, as each forms an important factor in an evenly balanced education ; even if another could be substituted to answer the purpose ; for this knowledge the girls specially require is mostly of a nature not gained from books. There is one practicable way, and only one. I think, in which we can, in the school room, aid the girls in this respect ; and it seems a pity they should not have the benefit of it. Every teacher knows that apart from the list of subjects taught, there is a strong educating force at work emanating from the teacher's own character and opinions ; and here would appear the opportunity to point the way, at least, and encourage the girls to make efforts on their own behalf. A proper appreciation of the worth and nobility of domestic knowledge could be instilled into their minds ; they could be led to see what a blessing and influence there are in a well ordered

home ; and also led to see the counterpart of the picture, what vices, what crimes even, are engendered in an ill-regulated household, where the mistress is ignorant or neglectful, extravagant or unsystematic. Thoughtful and judicious teachers would doubtless find many opportunities for doing this without detriment to the branches more directly under their tuition. I remember a short address given by our headmaster once, at the opening of the new year term at High School, in which this subject was touched on in a very happy and effective manner. While speaking to us in a wholesome practical and energetic strain, calculated to rouse the laziest of us to renewed efforts, he expressed the hope that while the girls would make proper advancement, during the new year, in the subjects taught in the school room, they would at the same time be equally attentive to that subject taught in their homes—domestic economy. It is incredible with what dignity this subject was suddenly invested, when we met it thus, in the company of, and on equal terms with, such aristocrats as Latin, euclid and chemistry.

The boys, too, could receive in a similar way many kindly encouragements to manliness, worthy purposes, settled methods, firm endeavours ; together with various aids to make the most of their capacities and opportunities.

There is one paragraph in Miss Stewart's paper, to which I would take exception :—" It matters not how much a woman may have at stake in the country ; how ardently she may desire to see rights maintained, to see wrongs redressed—she may be intelligent, cultured, refined—all this counts for nothing in this land of which the highest ruler is a woman whose administrative abilities have been unquestioned : a man may be ignorant, uneducated, illiterate—

able only to make his mark upon the ballot-paper—his vote to him merely a merchantable piece of property; but he is a *man*, he must have a voice in the councils of the people." This is certainly unfair, both to herself, and the land she lives in.

In our loved country women are honoured; their rights jealously protected; their intelligence, culture and refinement appreciated; and their influence treasured and felt in the very core of the nation's heart.

St. Joseph Island, QUEENIE.

LOVE OF HUMANITY.*

MISS E. LUCRETIA POWELL, LISTOWEL.

ALL men are brothers; believe it not if you wish, resent it if you will, deny it if you can, the grand truth still stands forth, mighty in its beauty, unalterable in its grandeur, and powerful in its sublimity. All the selfish teaching of the exclusive, the proud bearings of earth's aristocracy, the chilling disdain of the haughty, the grievous oppression of the great, the insufferable doctrines of superiority, the cruel wrongs man has inflicted on his brother man, would fain deny this great fact or crush it down from their sight and trample it under their feet, but it is truth and *truth* must prevail. Every day sees this love for brother growing and expanding in the human heart. Earth's *noblest* and best are all crying with that great woman, whose large heart beats in sympathy with prince and peasant, with the pure and the impure, with the virtuous and the vicious, "Oh may I be to other souls the cup of strength in some great agony." What grander aim can we conceive in life than to be our brother's helper? What higher joy than to inspire him with new courage to struggle on hopefully to the great goal of the human. We stand side by side with him in the race; dare we turn and gaze on him with cold pity and contempt? His right to run

there is just as solid as ours. He hastens along through the same thorny ways; the same passions grind his soul. Do they conquer him? The greater need for our sympathy, the greater reason why our hand should clasp his, and our strength should be imparted to renew all the nobler aspirations of his immortal nature, and call forth again the sturdy resolutions of manhood. See, the same cares harass his life, the same narrow bed awaits his frame, the same fearful journey into the unknown awes his heart. Oh! why let him feel at any other time in his life that terrible pang of loneliness that must then be endured? Why let him know that want of human sympathy which is death in life? Why force him to carry in his heart to the grave, to make his life's burden yet heavier, the remembrance of your indifference, coldness and scorn. Were our lives filled with this love of humanity the despairing cry of the human soul, "Is life worth living?" would not be wrung from our hearts in their hours of solitude and reflection. The blessings we would reap would repay us more than a hundred-fold. There are none among us who have not felt the power of human sympathy, none whose hearts have not been cheered in some of life's dark passages by a kind word or a sympathizing glance, none who have not felt glowing in

* Read before the Teachers' Association.

their souls the deepest gratitude to some benefactor, none who have not caught inspiration from the depths of some other nature which filled them with new life and gave them new power to struggle onward and upward. But greater joy than these experiences can impart may be ours, "for it is more blessed to give than to receive." Have you never felt, when you read the words of another which gave you fresh strength and resolution, a pang of envy for their influence and power followed by an intense longing to do something also for the benefit of others—a longing which craved even the meanest opportunity to prove its sincerity; but how often these feelings pass away and we sink into a cold lethargy from which nothing seems to rouse us; or our love for humanity becomes an abstraction and we, surrounded by countless opportunities of showing its power, ignore them all in the pursuit of some ideal. He who would do great deeds must never despise the little things. Progress, be it social, moral, or spiritual, must ever be made step by step, even as the lofty ladder is climbed by those who, planting their feet on the lowest round, ascend rung by rung. None of us can leap to manhood or womanhood at one stride, nor can we truly love humanity in the abstract if we despise it in the concrete. How do you regard that statesman who talks eloquently of the elevation of the masses, and yet hesitates to grasp with his gloved fingers the horny hand of the labourer; that orator who proclaims in stentorian tones, "All men are born free and equal," and yet shrinks from contact with any but an exclusive few; those men and women who boast themselves liberal enough to confess that all men are brothers, and yet talk contemptuously of the *common people* and the *vulgar crowd*? Do you think that these love humanity? Not in

the true and fullest sense, that true love would not despise any, even the meanest. It would find in the most degraded of the human family some redeeming feature; its pity would fathom depths in that soul that sin had ever barred more effectually from the sunlight; and it would prove to the world, as it has done in the past, the unbounded love and sympathy to elevate and ennoble the human race. This love of humanity calls on us with an unmistakable voice to strive to make ourselves purer and nobler. It will renew and perfect and beautify our characters once its influence permeates our souls, but it calls to its shrine single-hearted men and women who would scorn to sacrifice their brother's welfare to their own selfish ends and sinful passions. Could the miser, the drunkard, the vicious, the bank defrauder, the swindler, the slanderer, the robber, and the murderer stand there, their presence itself would condemn them and stamp their pretensions as the vilest hypocrisy. Would you help your brother by your influence, then that influence must be powerful for good. Would you stamp your creed with your insincerity, and so present it to the world with this foul blot, then you care not in your heart how your character influences others; you care not what an example you set for your fellow-man, you deny by your life that love for your brother that you proclaim with your lips. If we would be true to our fellows we must, above all, be true to ourselves—the second requires and demands the first, and first proclaims and perfects the second. Of what value is that love that seeks for its own pleasure only? How it pales viewed beside that sublime love which is so pure that it is happy in the happiness of others alone. Selfishness is one of the strongest enemies that besiege the human soul. When we arrive at the years of discretion we find it has full

possession of the citadel, then begins a fierce conflict with this tyrant which will never end till our tired hearts cease to beat. Would you have a strong armour for this warfare? Then take this love of humanity. It inspired the persevering labours of St. Paul, the untiring zeal of John Howard, the unwavering tenderness of Sarah Martin, the life sacrifice of Bishop Selwyn, the self-devotion of Florence Nightingale, the fearless denunciations of William Wilberforce, and the devoted affections of a host of others whose whole lives were an offering upon the altar of their brothers' need. These lives speak to us and to the world of the purpose purged, from every selfish taint, and proclaim to those who struggle in the toils of selfishness, to those who have felt the keen pang of discovering *self* as the motive power in actions they had hoped pure from its contamination, to those who have experienced the astonishment, perplexity and mortification consequent upon a careful analysis of those dark recesses of our spirits where self holds dominion that the victory has been, can be, and will be won again and again. Characters like these have made the whole world glow with their enthusiasm. Others have caught the inspiration and swelled the notes of their watchword till the whole world has resounded with the glorious cry, and their influence is never fully realized till we peer into the dark avenues of the past with the glorious light of the present. No. The full conviction of the power exerted by lives impregnated with this divine love for brothers, whose fruit is the God-like spirit of self sacrifice, never bursts upon our hearts till we review the past, and view ages in which the highest longing of human beings was a thirst for blood, and the aged, miserable and helpless were left to perish uncared for and abused; in which scores of unconscious inno-

cents were strangled or thrown upon the streets to die, and thousands upon thousands of cultured men and women glutted their insane desire for pleasure on the cruel horrors of the bloody arena; in which the wretched convict, bowed down with chains, toiled at the galley, and the down-trodden slave beat out his miserable existence in a vain struggle for the prized liberty; in the light of an age in which war is considered barbarous and cruel, and justifiable only in self-defence, and our cities are dotted with hospitals; educational institutes for the blind, deaf and dumb; homes of refuge for the aged, homeless, helpless, ruined and incurable; in which child-desertion is regarded as the most heartless crime, and great educational systems are sweeping away ignorance, vice and superstition; in which slavery is a thing almost unknown, and statesmen are taxing their utmost abilities to give equal rights and liberties to all, while on every side noble men and women are devoting their time, talents and energies to improve the condition of the wretched and relieve the sufferings of the sick, sorrowing and distressed. Black, indeed, was the pall that hung over the world's history till from the lips of that Perfect Life rang the words, "A new commandment I give you, That you love one another;" and again, "Love your enemies," "Do good to them that hate you." These words were the power that rent the veil of Jewish bigotry; they were the cords that rolled back the curtain of darkness that brooded over the Middle Ages; and they are the strong bands that are ever binding together more closely and firmly the children of the great family whose father loves its every member with an infinite tenderness. That life, the highest ideal that it is possible for the most profound mind to conceive, the mystery and depth of whose love for the human race we are

powerless to comprehend, stands before us as the one "great example"; and it is our privilege, yea, it is our duty, to model our lives after the life of Him who was perfect and to obey His divine precepts. All Nature proclaims to us the Great Creator's love and care. The budding trees, the blooming flowers, the ripening fields, the babbling streams, the soaring mountains and the sparkling heavens all speak to us of His tender solicitude for His creatures. Can it be that this love echoes not from heart to heart of those who share in its bounty? Is it possible that those who daily enjoy its gifts respond to its sweet notes with the jarring discords of bitter intolerance and deadly hatred? The annals of bloody wars, the horrors of the Inquisition, the fires of Smithfield, the massacre of St. Bartholomew, the groans of slavery, the writhings of the sensitive, and the cries of the wronged and oppressed appal our hearts with their answer, and we would fain hide our heads and cloak our faces when we see the aged sneered at, the infirm jostled aside in the race, the poorly clad shunned, the weary labourer despised, the failen and wretched scorned, and the bereaved wounded afresh by coarse, rude jests. How much of that love is reflected from the hearts of those who recoil from the touch of their poor and wretched brothers and sisters, their lips ever pressing the words, "Our circle," and "Our set." Where are the fruits of this sentiment in those who, in the very place where they kneel and pray to "the Creator and Preserver of all mankind for all sorts and conditions of men," gather up their draperies and shrink from the poor unfortunate stranger who has strayed into *their* $\Gamma \Xi \omega$, or turn upon him the cold, inquisitive glance which shows him only too plainly that his presence there is regarded as the most unpardonable intrusion? What charity

glowed in the soul of that woman who, in the late London riots, driving through that seething mass of humanity, of which every individual was bound to her by the tie of brotherhood, ordered her coachman to "drive over the dogs"? What shall we say of an age enjoying the blessings and privileges of this boasted nineteenth century, when society's favourites fondle and caress all sizes and varieties of unsightly pugs, while the homeless waif seeks nightly shelter on the door-steps of Toronto, the ragged gamin roams the streets of Paris, the hungry arab creeps through the alleys of London, and the wail of Elizabeth Barrett Browning's "cry of the children" rings their wrongs in our ears? How shall we answer when we thread our way through the crowded workshops where the poor day labourer ekes out a bare existence, or when we climb the narrow staircase and peer into the wretched attic where the starving seamstress stitches her life away in a vain struggle for the necessary subsistence, while there is yet fresh in our memory the vision of the magnificent office, gorgeous carriage and palatial residence of the haughty millionaire, who grinds down all classes with his huge monopolies? What mean the vexed Irish Question and the great Socialistic movements? Can we persuade ourselves that the Communists have no grounds for complaint and the Nihilists no grievances? Reflections such as these force us to bow our heads and exclaim with the poet Burns, "Man's inhumanity to man makes countless thousands mourn." Yes; it vies with the great destroyer, Death, in the number of hearts it rends and leaves sore and bleeding, and that too in a world where care and sorrow furrow every brow. Oh! why then should the failing of the erring receive such harsh judgment, and the deeds of the criminal meet with such fierce denun-

ciation? Why should the smallest provocation stir up such bitter feelings towards the offending, and cause such deadly enmity to rankle in our breasts? Why will the sufferers wilfully extort from their fellows in affliction one additional cry of anguish? Though we grant that civilization has improved the condition of the masses, that commerce has linked the interests of every nation, that toleration has procured precious rights and liberties for all, that education has enlarged and ennobled the thoughts of every language and every people, that Christianity has carried the lamp of light and love into the blackest and foulest retreats of vice, ignorance and superstition, yet we are forced to acknowledge in the face of all these facts that multitudes are yet bowing down before their fetish self and offering all the wealth of body, mind and soul upon its altars, till the deep fountains of their inner natures are so dried up by this soul-parching worship that they even question the purity of the motives of those, the constant aim of whose lives is shown by their earnest endeavour to make all with whom they come in contact nobler and happier. Around us on every side thousands are asking, "What do I owe to humanity?" They are pointing to our charitable institutions with pride and self-satisfaction, and are contenting themselves with occasional and spasmodic offerings for the relief of want and suffering that they may appease a rebuking conscience, never considering that sympathy and affection meet direr needs of the human soul than silver or gold ever satisfy. In vain they seek to hide their sins of omission and commission with the lawyer's cavilling question, "Who is my neighbour?" To them and to us comes the answer as it came to him, "All, all mankind, not only your neighbour but your brother;" and as that answer still resounds in our ears

what are those strains that float through our minds—"my duty to my neighbour is to love him as myself, to do unto all men as I would they should do unto me;" and again, further, listen, "My duty to my neighbour is to hurt nobody by word or deed, to be true and just in all my dealings, to bear no malice nor hatred in my heart." Ah! they are snatches from the old familiar catechism so oft repeated in our youth, and with the memory of years that are past, and the consciousness of evil thoughts that burn within, what one among us does not stand dumb before their condemnation? We, the most liberally endowed of all God's creation, prove less generous than the inanimate objects of nature around us. We, with all our intelligence, culture and refinement are less ready to diffuse the blessings we enjoy among our fellow-beings, and share with the needy the benefits that favour our lot, than the warm body to part with its heat and the luminous body to shed forth its light; and so, instead of the beautiful equilibrium that pervades the natural world, we find in society the deplorable inequalities that grieve the philanthropist, perplex the moralist, and baffle the philosopher.

Let us, dear fellow-teachers, search our hearts with the question, Does this great love of humanity fill our souls? Have we purged our minds from every subtle prejudice? Lurks there in our secret natures no cherished envy, hatred, malice, or uncharitableness? Do we daily battle with self, and are we striving to inspire the children committed to our charge with this sublime sentiment that both they and the world may reap a glorious harvest in the hallowing influence of their future lives? Let us realize that ours is no ordinary privilege. Ours it is to convince those young minds before the cares of the world have seared their tenderness and

bitter ingratitude has made gaping wounds into which cankering distrust thrusts its corroding roots, that nothing narrows the soul more than prejudice, nought can warp its finer chords like envy, that no more awful picture than that of a human mind feeding on hatred's poisonous fruit glares from the canvas of Dante's "Inferno," or Milton's Hell. Stung into greater action by the words of that writer of a recent editorial in the *Secular Review* who, when asked what his creed would do for the degraded and the criminal, replied in the most barbarous and revolting language, "I would treat them as the foulest carrion; I would stamp them out of existence; I would curse those who would dare to utter a word in their behalf," let us teach with more intense earnestness than ever before that love of brother and love of God will regener-

ate and elevate the lowest and the vilest of all mankind. Quickened by gleams from those larger moments of our existence when the soul bursts the bounds of the finite and stands in the presence chamber of the Infinite, may we ever, by thought, word and deed, shed forth in our daily lives the light of this love of humanity, and hasten the time when the world will be so pregnant with the divine truth of universal brotherhood that all ranks of society, from the nobility to the mud-sill, will echo in one grand chorus through endless ages Robert Browning's fervent soul-stirring inspiration—

"Let throngs press them to me;
Up and down amid men heart by heart
fare we;
Welcome squalid vesture, harsh voice,
hateful face.
God is soul, souls I and thou,
With souls should souls have place!"

THE RELATIONS OF HISTORY AND GEOGRAPHY.

BY JAMES BRYCE, M.P.

I PASS to Greece. You all know how much the circumstance that the territory of Greece is cut up by the sea and mountains into small plains and valleys, into peninsulas and islands, has had to do with all the salient features of Greek history. Some minor points deserve notice. I mention one as an example of the new light to be got by actually seeing a thing, because I do not recollect it as referred to in any book, and yet it is the very first thing that impresses itself on you when you travel in Greece. From most parts of Greece you can see Mount Parnassus. I suppose no one ever realizes how small Greece and Palestine are unless he goes there. One is misled by the atlas, because in the same atlas we see Greece, Russia, France and

Palestine all as maps of the same size, each occupying a quarto or double-quarto page. It is hardly going too far to say you can see Parnassus from all the higher ground of eastern and central Greece. You can see it from all Bœotia, from the long valley of which it stands up as the church of St. Mary does when you look along the Strand. You can see it from many parts of Attica, from the Acropolis of Athens, for instance; you see it from Ægina, in the Saronic Gulf; you see it from most parts of Argolis; you see it from the northern coast of Achaia. Of course you do not see it in the middle of Arcadia or in Laconia; but when you go west to Ithaca to visit Ulysses in his home, you see Parnassus again stand up grand and gray on the eastern horizon.

Think what an importance that fact has had. The central point of Greek history for many purposes is Delphi, and a great deal of Greek history centres round the god who has there his sanctuary. How much this visible presence of Apollo must have affected his worship, and all the associations which the Ionic race had with him. What a difference it must have made when you were actually able from your own home, or when you went to the top of your own Acropolis, or sailed to the neighbouring port, to see this Parnassus, to know that hard by the cleft beneath the two peaks there was this oracle and this sacred home of the lord of light and song. That gives you an idea of the extent to which Apollo and his dwelling-place came to be a living factor in Greek history, which is not possible before you know the fact that Parnassus is in sight from almost any part of Greece.

To the north-west of Greece we find the people of the Skipetar or Albanians. They are one of the earliest races in Europe. Their language and the language of the Basques are the only two still surviving European languages whose relations with other languages it has been found very difficult to determine, although I believe that philologists are now disposed to hold that Albanian belongs to the Indo-European (or, as it is now commonly but somewhat incorrectly called, Aryan) family of tongues. Northern Albania is a country of wild and savage mountains, exceedingly bold and precipitous, and forming a sort of knot at the head of the upper valleys of the Drin and Vardar. When you sail across the Lake of Skodra (Scutari), and see this splendid mass of rocky mountains towering above the smooth lake bosom on the east, deep gorges below, and patches of snow on the summits even in mid-summer, you begin to understand

why the Albanians should have remained a distinct people, preserving their ancient tongue and their primitive usages, many of them singularly like those recorded in Homer. It is a remarkable fact that to the south and south-east of the city of Skodra, for seventy or eighty miles, scarcely any remains of buildings, roads, or bridges have been found that point to Roman occupation; and yet this country was for many centuries an integral part of the Roman Empire. The conclusion is that the Romans did not trouble themselves to civilize it; they left the tribes to their own independence. That independence they have in substance retained ever since. Even in the less difficult regions of Southern Albania Ali Pasha ruled as a sovereign at Janina, and the tribes of the northern mountains are the most troublesome of all the nominal subjects of the Sultan in Europe, a standing menace to the peace of those countries.

Montenegro is an extremely curious instance of the way in which favourable geographical conditions may aid a small people to achieve a fame and a place in the world quite out of proportion to their numbers. The Black Mountain is the one place where a South Slavonic community maintained themselves in independence, sometimes seeing their territory overrun by the Turks, but never acknowledging Turkish authority *de jure* from the time of the Turkish Conquest of the fifteenth century down to the Treaty of Berlin. Montenegro could not have done that but for her geographical structure. She is a high mass of limestone: you cannot call it a plateau, because it is seamed by many valleys, and rises into many sharp mountain-peaks. Still, it is a mountain mass, the average height of which is rather more than 2,000 feet above the sea with summits reaching 5,000. It is bare limestone, so that

there is hardly anything grown on it, only grass—and very good grass—in spots, with little patches of corn and potatoes, and it has scarcely any water. Its upland is covered with snow in winter, while in summer the invaders have to carry their water with them, a serious difficulty when there were no roads, and active mountaineers fired from behind every rock, a difficulty which becomes more serious the larger the invading force. Consequently it is one of the most impracticable regions imaginable for an invading army. It is owing to those circumstances that this handful of people—because the Montenegrins of the seventeenth century did not number more than 40,000 or 50,000—have maintained their independence. That they did maintain it is a fact most important in the history of the Balkan Peninsula, and may have great consequences yet to come.

The Illyric Archipelago suggests another illustration of the influence of geography on the life and character of a people. The coast of Illyria or Dalmatia is a mass of promontories and islands, all rocky, unfit for tillage, but usually well wooded, separated by narrow arms of the sea. It is just the sort of place where a fierce maritime people would spring up. It was *par excellence* the pirate country of the ancient world; its rovers were the scourge of the Adriatic and Ionian seas until Rome, not without great trouble, suppressed them. For some centuries it supplied light and nimble galleys and skilful sailors for the Roman fleets; and when in the disorders of the fifth and following centuries these fleets disappeared, the Illyrian pirates were again the terror of the Adriatic and the seas opening into it during the earlier Middle Ages. Now the Dalmatians feed the navy of Austria, and send out bold sailors over the world. In fact, you have very much the same conditions which

made Norway the home of the pirates of the Atlantic. Just as the Norse and Danish Vikings undertook the whole of the piracy for the Western world between the eighth and thirteenth centuries, so in the same way the Illyrians did in the ancient world, a parallel which adds interest to the history of both those countries as well as to their geography as soon as it is made clear. It is easy for any one studying the geography of Norway, as of Illyria, to understand why the Norwegians should have been in ages of disorder a piratical people, in ages of peace the owners of a great mercantile marine.

We pass to Italy. The dominant feature of the Italian Peninsula is the fact that the Apennines are nearer the east coast than the west; consequently civilization and empire begin and grow on the southern and western side of the Apennines rather than on the northern and eastern side, and you have the ruling powers of Italy, the Etruscans, the Samnites, and lastly the Romans, on the Arno and Tiber side of the Apennines. Hence also the history of Rome brings her into early relations with Carthage as the mistress of the western seas, whereas she had comparatively little intercourse with the States of continental Greece. She comes into relation with Greek civilization, but it is through the Greek colonies in Southern Italy and Sicily. And when we come to the Middle Ages, we find that the first conspicuous development of wealth and the arts in Italy took place in the great Lombard plain, with its immense fertility, and in Tuscany. And here we come upon an ethnological influence, because the admixture of the northern races with the Italic population had been chiefly in Lombardy and in Northern and Central Italy whereas Teutonic conquest and settlement had scarcely affected the countries of Southern Italy. Hence

it is chiefly in the north and centre that we find the new republics springing up, filled with an active and industrious population, soon displaying a wonderful creative power in art and literature. Thus the brilliant and eventful annals of mediæval Italy are conditioned partly by the circumstances of soil and climate, which are more generally favourable in Lombardy and Tuscany than in Southern Italy, since in the plains of Apulia and Lucania the richness of the soil is balanced by its unhealthiness; partly by an ethnological influence, that of the Teutonic invaders, who coming from the north settled in the northern parts of the peninsula, and reinvigorated its decaying population; partly by the hold which the East Roman Empire maintains on South-Eastern Italy, because that region lies near the coast of Epirus, which still obeyed the Emperors.

France offers herself for a few remarks, which show the connection of her geographical structure with her history. The salient facts in French geography are the sharp lines of demarcation between France and Spain, created by the Pyrenees, and between France and Italy, created by the Alps. It has been found extremely difficult to maintain any political connection across these. Among the Romans there was a marked distinction between Cis-Alpine Gaul and Trans-Alpine Gaul, though the population of both sides was Gallic; and you find that when the French kings, at the end of the Middle Ages, endeavoured to keep a hold on Northern Italy, the existence of the Alps was a fatal obstacle. They could carry an army across the Alps, but they found the greatest possible difficulty in keeping a country in subjection divided by that great mountain barrier. The same remark applies to the Pyrenees. No opposition in Europe is sharper than that between

the French and the Spaniards, and yet you are struck by the fact that along the Eastern Pyrenees the language is almost the same in Catalonia on the South, and in Foix and Roussillon on the north, while at the western end of the chain the Basque race and tongue occupy both slopes of the mountains. The antagonism of Frenchmen and Spaniards lies not so much in a difference of race as in the fact that history has impressed so deep and diverse a stamp of nationality on each people. The political history of the two countries has been so much severed by the existence of this mountain chain, that the Pyrenees always became a political boundary, even when territories belonging to Spain were added to France. Charles the Great, for instance, held the north-east corner of Spain, but it was soon lost. Some one said after a famous Franco-Spanish marriage, "The Pyrenees have ceased to exist." They soon reappeared, and Spain was again the enemy of France. The debatable ground in France is in the north-east. That is the region through which the immigrations come. It was the open gate whereby the Burgundian and Frankish tribes entered Gaul. So far as there is a natural boundary on this side, it is constituted, not as geographers used to allege, by the Rhine, but by the mountains, the principal part of which we know under the name of the Vosges, which are really the dividing line between the Latinized Celtic population on the one side and the Germanic population on the other. It is also a remarkable fact that you have got no division of mountains or high land running across France from east to west; consequently, although ethnological or linguistic differences have at various times existed between Northern and Southern France, these have tended to disappear. There have been many times in the history of France when, if there had been a

chain of mountains from the mouth of the Loire, or the neighbourhood of La Rochelle, across to Lyons and Geneva, there might have befallen a permanent separation of France into northern and southern; but such a separation has never taken place. There was a time when the *langue d'oc* was more different from the *langue d'oïl* than from the speech of Northern Italy; and even now, in the lower valley of the Rhone, the passing traveller is struck by the difference between the dialects there and those of Northern France; but the fact that there is nothing that constitutes a natural boundary has prevented a sharp separation of north and south in France, and has made France what it is, an eminently unified country, in spite of the original diversity of its races.* On the other hand, the Burgundian kingdom, which was an important political factor at one time, found itself cut in two by the Jura Mountains. Its northern part included both Western Switzerland and Franche Comté; but these regions, because severed by the Jura, fell asunder, and while Eastern Burgundy became the western part of modern Switzerland, Western Burgundy dropped into the hands of the French kings, and is now as French as any other part of France.

The British Isles do not offer us quite as much opportunity for observing the influences of physical geography as those other countries that I have mentioned. The scale of physical phenomena in our isles is comparatively small, and the features of our history so peculiar as to require a long examination in order to trace their relation to our physical geo-

graphy. But one may attempt to indicate a few points. It is remarkable that the balance of population and political influence should have, within the last hundred years, shifted from the south to the north of England. This is mainly due to the mineral wealth of the north of England; perhaps also to the larger immixture in the north-eastern counties of Scandinavian blood. The discovery of the coal-fields and deposits of ironstone has given an immense impetus to wealth, to manufactures, and to population there, and has correspondingly shifted the balance of power. In the days of the early Plantagenet kings the north was of no account whatever. English history, except in connection with the wars with the Scots, lay south of the Trent, but it now lies quite as much to the north as to the south. The same remark may be made with regard to Scotland. There you have the Highlands dividing the northern part from the southern, and until a century ago the inhabitants of the Highlands were almost foreigners to the inhabitants of the south; and it was not until after 1745, when roads were introduced into the Highlands, and the country was reduced to peace and order, that the population began to become assimilated to that of the Lowlands. The battle-fields of Scotland lie either between Edinburgh and the English border, or about the frontier line of the Lowlands and the Highlands. Within a radius of ten miles from Stirling Castle there are four famous battlefields (Bannockburn, Abbey Craig, Falkirk, Sheriffmuir); and the history of Scotland, in the romantic times of the Stuart kings, centres itself in the piece of country from Edinburgh to Perth and Stirling, including the so called kingdom of Fife.

In our most recent political history it is worth while to notice how the

* It is worth remarking that there are considerable differences between the population, as also between the architecture, of the parts of France to the east and west respectively of the Cevennes and mountains of the Ardèche.

results of the late general election have been affected by the physical geography of the country. Some people have been astonished to find that Eastern and Western Lancashire have returned members of a different political complexion, as have also Western and Eastern Yorkshire; but the reason is very obvious if you look at the geology and mineral-bearing character of the district. Eastern Yorkshire is mainly agricultural, and all the influences which the upper class and the farmers can bring to bear on the agricultural population have full scope there; while South-Western Yorkshire is manufacturing and mining, with a population inclined to Radical opinions. In the same way Eastern Lancashire is manufacturing and mining; while Western Lancashire is agricultural, and disposed to follow the lead of the old land-owning families. Those who examine Lancashire schools are struck by the difference between the sharpness of the boys in the East Lancashire hill country and the sluggishness of those who dwell on the flats along the coast between Liverpool and Morecambe.

Another illustration is found in the case of Ulster. The Scotch colony which entered Ulster in the seventeenth century penetrated almost an equal distance in every direction from the point where it crossed the North Channel from Southern Scotland to the Bay of Belfast; and if you put one end of a compass on that bay and describe a semi-circle, you will find the Scotch Protestant population goes to almost an equal distance all round, from the Atlantic coast near Londonderry until you strike the Irish Sea in the neighbourhood of Newry. But there is one exception to this. It is found in the south-western division of Down. The north and east of that county are mainly occupied by the descendants of the Scotch settlers. But in the south-west there is a group

of lofty mountains, the mountains of Mourne. Into those mountains the aboriginal Irish retired, and therefore South-West Down returns a Catholic and Nationalist member to Parliament, while the other parts of Down and Antrim return Protestant and Conservative members.

Time fails me to show with proper detail the relations between the geography and the history of North America, a continent where we see many of the features of Europe repeated on a larger scale, but with some striking differences. I may, however, observe how much the economical conditions of North America are affected by the fact that the great valley plain on the Mississippi River lies open towards the north, permitting the cold influences to be felt down to the Gulf of Mexico, while there does not exist to the south any great reservoir of hot air similar to the Sahara. From these and other causes we find much colder temperature in the same latitude in North America than in the Old World. New York is in about the same latitude as Madrid and Naples, but has a much more severe climate. New Orleans is in about the same latitude as Cairo; but, as you know, Cairo is practically tropical, whereas New Orleans is not. It is hot in summer, but has a totally different kind of climate from Cairo. That is a fact of the utmost importance with regard to the political and economical history of America. The white race maintains itself and is capable of labour in the Gulf States, although, to be sure, the black race works more easily and increases more rapidly. All America east of the Rocky Mountains seems likely to cohere in one political body, because the West is firmly linked to the East and the South through which its commerce reaches the sea; and because there is nothing resembling a natural boundary to sever any one part of the country from any other. It is only in

a few places that the Alleghanies are a barrier interrupting communication. On the other hand, huge mountains and wide deserts part California from the Mississippi States, and although economic and political forces will probably continue to bind the Pacific States to their older sisters, there is to some extent already a Californian type of manners and character different from that which prevails through other parts of the West.

Before I close, I will make two general observations as to the different relations that exist between man and Nature as time runs on and history works herself into new forms. The first of these is that man in his early stages is at the mercy of Nature. Nature does with him practically whatever she likes. He is obliged to adapt himself entirely to her. But, in process of time, he learns to raise himself above her. It is true he does so by humouring her, so to speak, by submitting to her forces. In the famous phrase of Bacon, *Natura non nisi parendo vincitur*, Nature is not conquered except by obeying her; but the skill which man acquires is such as to make him in his higher stages of development always more and more independent of Nature, and able to bend her to his will in a way that aboriginal man could not do. He becomes independent of climate, because he has houses and clothes; he becomes independent of winds, because he propels his vessels by steam; to a large extent he becomes independent of daylight, because he can produce artificial light. Think what a difference it makes to the industries carried on in our manufactories that we can carry them on by night as well as by day, because we have gas and electricity; whereas six centuries ago the workman in the south of Europe was able to get many more working hours than a workman in Northern Europe. You may say that the Northern workman was re-

compensated for his winter darkness by longer summer days; but there must be a certain regularity about labour, and in the case of great industrial establishments it is essential that work should proceed during a certain number of hours all the year round. Therefore, the discovery of artificial light has been a most important factor in changing the industrial and economical conditions of Northern countries. In the same way, the early races of man were only able to migrate as Nature made it easy for them, by giving smooth or narrow seas and favouring winds; but in a more advanced state, man is able to migrate where and how he pleases, and finds conveyance so cheap that he can carry labour from one continent to another. Think of the great migration of the Irish to America, of the great migration of the Chinese to Western America and the isles of the Pacific. In Hawaii the Chinese now begin to form the bulk of the labouring population; and they are kept with difficulty from occupying Australia. The enormous negro population of North and South America is due to the slave trade. We have in our own times begun to import Indian coolies into the West India islands, whose staple products are now due to their labour. Such transfers of population would be impossible but for the extreme cheapness of transport due to recent scientific discovery. In considering how geography and natural conditions affect the development of man we must therefore bear in mind that the longer he lives on this planet and becomes master of the secrets of science, the more he is able to make the forces of Nature his servants.

Another observation is, that as the relations of remote parts of the world to one another have become a great deal closer and more intimate than formerly; so that the whole system of politics and commerce is now more complex than it was in the ancient or

in the mediæval world. In fact, one of the greatest achievements of science has been in making the world small, and the result of its smallness is that the fortunes of every race and state are now, or may at any moment become, involved with those of any other. This is due partly to the swiftness of steam communication, partly to the invention of the telegraph, partly to cheapness of transit, which makes such progress that an invention like the compound steam engine reduced the charge for marine transportation something like 20 or 30 per cent., and one hears that during the last two or three years improvements in machinery and in the economizing of fuel have reduced it 25 per cent more. I will give two instances of how this works. One is the enormous development of pilgrimages, particularly in the Mohammedan world. Hosts of pilgrims from Turkestan, from Morocco, from India and the farthest East, now find their way to Mecca by steamships, and thereby the intensity of Mussulman feeling, the sense of solidarity in the Mohammedan world, has been powerfully quickened. Another is the cheapening of the conveyance of food products. See how that works. Our English agriculturists have been ruined, not merely by the greater richness of virgin American soils, but also by cheap transportation from the North-Western States; and now the farmers of these States are feeling the competition of Indian wheat coming through the Suez Canal; and every railway that is made in India, cheapening the conveyance of wheat from the inland towns to Bombay, and every improvement in marine engines, tells on the farmers in Minnesota, and by inflaming their animosity against the railroad and elevator companies, affects the internal politics of these new democratic communities. In the same way, the relations of the different States of Europe to one an-

other are altered, because the wealth and trade of each depend on various articles of exchange; and so the political measures to which each ruling statesman resorts are largely suggested by the commercial problems he has to face. The protective system of Prince Bismarck has been mainly due to the cheaper importation from abroad into Germany of the staple articles of food; and the attempt to foster the sugar industries in the States of Central Europe by bounties, all tell upon the commercial relations of those States with one another and with ourselves. It is none too much to say that this whole planet of ours, as we now know it, is for practical purposes very much smaller than the world was in the time of Herodotus. To him it extended from Gades and the Pillars of Hercules to the farther end of the Black Sea at the river Phasis and the Caucasus Mountains. He just knew of the Danube on the north, and of Ethiopia on the south, and that was all. Yet that world of his, 2,500 miles long by 1,500 wide, was a far larger world, with more human variety in it, more difficult to explore, with fewer and fainter relations between its different parts, than the whole planet is to us now, when nearly all its habitable parts have been surveyed, when the great races, the great languages, the great religions, spreading swiftly over its surface, are swallowing up the lesser. Yet, though the earth has become so much smaller, it is not either less interesting or less difficult, to interpret, and the problems with which a philosophical geographer has now to deal in making his science available for the purposes of practical economics and politics are as complex and difficult as they ever were before, and indeed grow more complex and more difficult as the relations of peoples and countries grow closer and more delicate.—*Contemporary Review.*

SCRIPTURE LESSONS FOR SCHOOL AND HOME.

NOTES FOR TEACHERS.

THE CHILDREN OF THE BIBLE.

No 8. DAVID.

To read—1 Sam. xvi., xvii. (parts of).

I. THE YOUNG SHEPHERD. (Read xvi. 1-13.) Have had a story of a Judge—to-day of one who afterwards became a king. Who was first King of Israel? Saul began well, but soon disobeyed God. Another must be chosen. Where was one to be found? What sort of a king would be wanted? *Brave*, to fight against enemies—*Wise*, to rule a great nation—*Godly*, to teach fear of God. God knew where one such to be found. Who was sent to anoint him? Can picture Samuel, old, gray-haired (1 Sam. xii. 2) prophet, coming to little village of Bethlehem—the sudden calling of the people from their work—the alarm of the elders (verse 4)—the evening sacrifice—the calling up of Jesse's sons, What did Samuel look at? Height, strength, outward appearance. What does God look at? So six sons passed by and passed over. Where does the right one come from? How surprised David must have been, and his brothers, and Jesse! But Samuel did as God told him. What came upon David? Had already had measure of God's Spirit—knew God—loved Him—sang His praises when in fields, (Psa. viii., xxiii., etc.), now has the special gift of Spirit to prepare him for future life.

II. THE YOUNG COURTIER. (Read xvi. 14-23.) What was the matter with Saul? Had forsaken God—displeased Him, and evil spirit permitted now to trouble him. Probably showed itself by low spirits, sulky temper, etc. What do the servants suggest? So

David is sent for. Another surprise to him. What a change from fields—minding flock—to a king's court. But what a good thing for him to learn about court life—make friends there—be prepared for future life. What did he take with him? Eastern custom to take a present. How did Saul regard him? Probably no idea of what Samuel had done to him. See another instance of God's working things together for good. What effect did the playing have? No wonder Saul loved him—kept him with him—made him his armour-bearer.

III. THE YOUNG WARRIOR. (Read xvii. 32-37.) Story well known—need only point out one or two things. See David's *trust*. God had helped him before, and would again. Also his *boldness*. Goes out unarmed and alone against the giant. What was the result? The giant killed—enemy defeated—the country saved.

LESSONS. Notice the following points in David's character:—(1) *His seeking God early*. Seems to have feared God from his earliest childhood. Began well, and so went on well (2) *His discretion*. When in Saul's court behaved wisely, and made friends—fitting himself for future life. (3) *His courage*—both bodily and morally. A splendid example for boys. Secret of all was presence of God's Spirit in his heart.

TEXT: *Even a child is known by his doings—Quiver.*

No. 9. SOLOMO. I.

To read—1 Chron. xxviii.; 2 Chron. i. (parts of).

I. A PIOUS FATHER. (Read 1 Chron. xxviii. 5-10, 20, 21.) David's

long reign of forty years come to an end—was called man after God's own heart—loved and served God much—yet guilty of great sin. But having repented (Ps. li.) was pardoned. Was very anxious to build a temple for God—not allowed to do so, because had shed much blood. So spends last days in giving good advice to Solomon, a lad about eighteen. What does he urge upon him? (a) *To study God's Word.* What must he seek for and keep? (Verse 8.) Not merely what is written in the Law of Moses, but would learn God's will day by day. (b) *To serve God perfectly.* David had served God, but had fallen into grievous sin—wants his son to avoid his errors, and give whole heart to God. Reminds him how God searches even the thoughts. Then he will have a happy and prosperous life. (c) *To honour God's House.* David has done all he can—has made the plan—collected the materials—arranged the order of Priests, Levites, and services. Now Solomon must carry it out—need have no anxiety—God will be with him (verse 20) and enable him to finish it.

II. A WISE SON. (Read 2 Chron. i. 1-12.) The king dead—David—shepherd, psalmist, prophet, king—the new king reigns. All in his

favour. Country prosperous and at peace. Is himself young, vigorous, popular. People contented—willing to obey him. Notice two things:— (a) *He begins well.* Old proverb says, "Well begun, half done." What is his first act? He dedicates himself to God. Assembles all the people at Gibeon. What was there? Moses' tabernacle with the brazen altar. What does he offer? This a public acknowledgment of God. Shows the people whom he intends to serve. Desires them to join in public worship of God. (b) *Seeks wisdom.* Public worship not enough—must be devotion of heart to God. Question on the dream. What offer does God make him? What does he choose? Why does Solomon choose wisdom? Feels his own insufficiency. David was great and wise—he is young and ignorant, and with great responsibility. His prayer heard—he receives all he asks, and more—wisdom, riches, honour—everything to help the young king. What a happy and useful life lies before him! Alas! know how afterward he fell away from God. Love of pleasure was his ruin. Still, so far, all is well, and his second act was to build a great Temple for God's House.

TEXT. *The fear of the Lord, that is wisdom.—Quiver.*

THE TEACHERS' ASSOCIATION AND THE EASTER HOLIDAYS.

Editor of THE MONTHLY:

SIR,—It seems to me there is something very inconsistent in the Teachers' Association recommending a change in the time of holding the Convention, from the second week in August to the Tuesday, Wednesday and Thursday before Good Friday.

Those who voted for the change

either believe in the "Christian year" or they do not. If they believe in it, how can they propose to hold a convention on the days specially set apart to commemorate the sufferings of our blessed Lord? If they do not believe in the Christian year, they ought to be satisfied with a secular holiday. Those who are inclined to ignore or scoff at religious seasons

should remember that without them we should have neither Christmas nor Easter holidays. Why, then, should we profess to honour these solemn days, and then prostitute them to unworthy purposes?

But is not the real reason to be traced to a desire to get away from the hated school room? When Solomon said, "Heil and destruction are

never full," possibly he had in his mind's eye those teachers who care not whose funeral it is provided they can get another holiday. Would it not be well if some of these gentlemen were to look out for a profession which has less work and longer vacations?

J. H. KNIGHT.

Lindsay, August 24.

EDITORIAL.

UNIVERSITY FEDERATION.

THE General Conference of the Methodist Church in Canada, by a vote of 138 to 113, decided to adopt the scheme of University Federation. The discussion excited a good deal of interest, and lasted three days. The vote was a close one, and unless the opponents to the scheme agree to heartily support what they so ably, so strenuously and no doubt conscientiously oppose, the scheme will be a failure.

A most important departure is the appointment of Dr. Potts as Secretary of the educational work of the Methodist Church in Canada—"the right man in the right place." We cordially greet him as the chief executive officer in education of this influential branch of the Christian Church.

THE RECENT HIGH SCHOOL ENTRANCE EXAMINATION.

THE Minister of Education has issued a circular in reference to the recent Entrance Examination, the first sentence of which reads thus: "In view of the complaints made respecting the papers prepared for the recent Entrance Examination to High Schools, I deemed it advisable to confirm every recommendation made by the local Board of Examiners."

Now we are quite sure Mr. Ross did not confirm these recommenda-

tions, because, like the unjust judge, he was wearied with the numerous complaints, but because these complaints were just, and because the work of the examiners was not wisely done. No doubt, there is room for improvement, as he implies, in the method of preparing pupils for this examination, and it is a sad commentary upon our system of training teachers that he has to admonish them that there should be "more thoughtful teaching, more mental training, and less dependence upon memory simply." Why should not all this be made part of their creed before they become teachers at all?

We think those teachers are right who say that history cannot be properly taught at the age when pupils enter the High School. In proof of this statement, we will refer to the remarks of the Minister himself in support of the contrary opinion. He says: "Is it not possible for the pupil to give an intelligent idea of the higher civilization of the Roman occupation of Great Britain as compared with its condition at the time of the invasion of Julius Cæsar—of the bold stand made by King Alfred time and again against the Danes—of the despotism of the Stuarts—of the benefits of the *Habeas Corpus*—of the character of the Georges, etc.?"

The meaning of the first few words is rather obscure, but the context

proves that he means the civilization of the Britons, not that of the Romans.

Now there is no doubt that a pupil who is prepared to enter the High School should be able to give an intelligent idea of that higher civilization, so far as it really existed; but to do this he would only have to memorize a fact which could hardly be called a leading one. What causes which led to this higher civilization is a much more important question, and this is just what the pupil, from immaturity of mind, would be unable to answer. It would require an effort of memory only "to give an intelligent idea of the bold stand King Alfred made time and again against the Danes"; but it would need much more than an effort of memory to enable the ordinary Fourth Book pupil to give an intelligent explanation of the reasons why he is called "The Great"; yet it is the ability to answer such a question as this which is a true test of the proper study of history. It would be easier to give from memory an intelligent idea of the despotism of the Stuarts than it would be for the average Fourth Book pupil to form that idea in his own mind. We need hardly say which of these the proper study of history should aim at, and which is within the scope of the Fourth Book pupil. The other instances might be dealt with in the same manner, but enough has been said to show that it is unreasonable to expect maturity of mind enough, on the part of Fourth Book pupils, to go beyond stating the mere facts of history, and as these are admittedly of little value by themselves, it would be better to drop the study from the Fourth Class programme altogether. Mr. Ross enumerates literature, grammar and history as the subjects which offered the greatest difficulty to candidates. He might have included spelling, for this was of such a preposterous character, that we have heard of one presiding examiner, at

least, who did not know how to pronounce some of the words correctly, and a number of the more intelligent examiners felt compelled to exemplify the words in phrases or sentences for the information of the candidates.

THE SEVEN LAWS OF TEACHING.*

THIS little book is a valuable contribution to the science and art of education. It could only have been written by a man who had thought long and seriously upon what had come under his observation in the school room. The book would be a most useful one to put into the hands of our student teachers to "read, mark, learn and inwardly digest." Indeed, if we except Professor Payne's lectures, we know of no volume that is equal to it for this purpose. If Dr. Gregory fails in any point, it is in the illustrations he uses, which in many instances throw no additional light upon his meaning. As our readers may be curious to know what his Seven Laws of Teaching are, we give them here:

(1) A *teacher* must be one who KNOWS the lesson or truth to be taught. (2) A *learner* is one who ATTENDS with interest the lesson given. (3) The *language* used as a MEDIUM between teacher and learner must be COMMON to both. (4) The *lesson* to be learned must be explainable in the terms of truth already known by the learner—the UNKNOWN must be explained by the KNOWN. (5) *Teaching* is AROUSING and USING the *pupil's mind* to form in it a desired conception or thought. (6) *Learning* is THINKING into one's own UNDERSTANDING a new idea or truth. (7) The *test and proof* of teaching done, the finishing and fastening process, must be a RE-VIEWING, RE-THINKING, RE-KNOWING and RE-PRODUCING of the knowledge taught.

*By John M. Gregory, LL.D. Congregational Sunday-School and Publishing Society, Boston.

SCHOOL WORK.

MATHEMATICS.

ARCHIBALD MACMURCHY, M.A., TORONTO,
EDITOR.

NOTES.

BY M. GLASHAN.

See *June-July, No. p. 244.*

Q. 1. appeared some two years ago in a paper set to candidates for junior matriculation in Toronto University. On this account and from the fact that the problem is a particular case of a well-known elementary theorem an examiner might reasonably assume that the question would not be strange to pupils trained by mathematical masters. Any candidate who fully understood the meaning of an exponent might have solved the problem by simple division.

Q. 2 can be worked by multiplication and addition, or be made an exercise in factoring.

Q. 3 (a) and (b) are easy exercises in the theory of divisors and the principle of symmetry. The examinees are told that the factors are linear, therefore they know, or ought to know, that there are but five forms of factor they need try. The problems here given involve the three simplest types.

Q. 4 is an example of the form in which homogeneous simple equations usually present themselves in actual investigations. As the required result is given and only the proof of its accuracy required, a candidate whose strength lay in mathematics would supply the proof instantly thus:—

$$\therefore \frac{(2x-y) + (2y-z) + (2z-x)}{(2a+b) + (2b+c) + (2c+a)} = \frac{12(2x-y) + 13(2y-z) + 17(2z-x)}{12(2a+b) + 13(2b+c) + 17(2c+a)}$$

\therefore result required.

Q. 5 is an example of the most important use in algebra of the process for finding H. C. F.

Q. 6 affords an illustration of the application of the widely useful theorem:

$$\text{"If } \frac{a}{b} = \frac{c}{d}, \therefore \frac{a}{b} = \frac{ma+nc}{mb+nd} \text{"}$$

An examinee strong in mathematics would instantly notice that the first three numerators can be derived from each other by cyclic substitutions of $(x, y-z)$ and that therefore their sum is a numerical multiple of $x+y-z$, the fourth numerator; hence the sum of their denominators is the same multiple of 6, the fourth denominator. This gives the value of x at once, and the values of y and z follow easily. A "Third Class" examinee, looking at the paper, proposed the following instantaneous solution:

$$\begin{aligned} &\text{Each of the given fractions} \\ &= \frac{(x+y-z) + (x+2y-3z) - (2x+3y-4z)}{6+(4x-1)-(x+5)} \\ &= \frac{3x}{5x} = 1, \therefore \text{etc.} \end{aligned}$$

Q. 7 is an easy simultaneous quadratic.

Q. 8 is a very simple problem in elimination, one of the commonest operations in algebra.

Q. 9 is an ordinary problem. It was taken, slightly modified, from an algebra paper set to boys and girls in England, and might therefore be judged not too difficult for candidates for teachers' certificates valid for life in Ontario.

MODERN LANGUAGES.

Editors. { H. I. STRANG, B.A., Goderich,
W. H. FRASER, B.A., Toronto.

EXERCISES IN ENGLISH.

1. Point out all the phrases in the following extract, and show the grammatical value and relation of each:

Then he climbed to the tower of the church, Up the wooden stairs, with stealthy tread, To the belfry chamber overhead, And startled the pigeons from their perch On the sombre rafters, that round him made Masses and moving shapes of shade; Up the light ladder, slender and tall, To the highest window in the wall,

Where he paused to listen and look down
A moment on the roofs of the quiet town,
And the moonlight flowing over all.

2. Contract the following complex sentences to simple ones :

(a) It attracted the attention of all that were present.

(b) It is probable that he is not the author.

(c) He stayed with us while the trial was going on.

(d) Most of the painters whom she employed were foreigners.

(e) I did not hear the name of the gentleman who spoke last.

(f) When he was fourteen years old he was apprenticed to a printer.

(g) I can't let you go unless he gives permission.

(h) When he learned how much it was worth he was greatly elated.

(i) The age in which we live is noted for marvellous inventions.

(j) He felt inclined to doubt whether the statements which the lecturer had made were correct.

3. Change the voice of the verbs in the following :

(a) They at once sent for the nearest doctor.

(b) He was taken to task for it by his father.

(c) It will probably never be known who wrote it.

(d) The secretary told us that application would be received to-day.

(e) Has the plan he spoke of been tried by any one here?

(f) He might have got rid of it in another way.

(g) The question for us to consider is how my the evil be prevented.

(h) They all looked on him as an authority.

(i) Apples which are intended to be kept should be picked by hand.

(j) As might have been expected the children had broken it.

4. (a) Change from direct to indirect narrative :

"Brothers," said Gray Eagle, as soon as they were gathered round, "an accident has befallen me, but let not this prevent your

going to a warmer climate. Winter is rapidly approaching, and you cannot remain here. It is better that I alone should die, than for you all to suffer on my account."

(b) Change from indirect to direct :

With one voice they replied that they would not forsake him. They would share his sufferings; they would abandon their journey, and take care of him as he had done of them before they were all able to take care of themselves. If the chill climate killed him it should kill them; and whether he lived or died they would live or die with him.

5. Express each of the following in at least two different ways, changing both the construction and the language :

(a) The atmosphere is composed principally of two gases—oxygen and nitrogen.

(b) His prices were higher than any other portrait painter had asked.

(c) Water is indispensable to both the animal and the vegetable world.

(d) The chief supplies of gold are obtained from California and Australia.

(e) To the mariner the barometer is of great service by enabling him to foretell the approach of a storm.

6. Re-write in your own words :

Well by his visage you might know
He was a stalwart knight, and keen,
And had in many a battle been.
The scar on his brown cheek revealed
A token true of Bosworth field;
His eyebrows dark, and eye of fire,
Showed spirit proud, and prompt to ire;
Yet lines of thought upon his cheek
Did deep design and counsel speak.

7. Combine into not more than ten sentences :

Once the weather was very dry. A crow was thirsty. She searched everywhere for water. She could not find a drop. She was croaking for sorrow. She spied a jug. She flew down at once. She eagerly pushed in her bill. It was of no use. There was plenty of water in the jug. She could not reach it. The neck of the vessel was so narrow. She tried for half an hour to reach it. It was in vain. She attempted to tip the jug over. It was too heavy for her. She could not stir it. She was in despair.

She was on the point of giving up. A new thought struck her. It was to drop stones into the jug. Then the water would rise higher. In time it would rise to her bill. She was nearly fainting with thirst. She set bravely to work. She dropped in stones. Each time the water rose. Not half an hour passed. The clever crow had drunk her fill.

8. Divide the following into clauses, and tell the grammatical value and relation of each :

(a) *By the time when some of the boys that read this article have become o'd men, the American bison will probably be seen only in places where it is kept for curiosity's sake.*

(b) *At the close of the day, the three brothers that remained, mounting to the very top of the tree, with Gray Eagle in their arms, watched them as they vanished away southward, till their forms blended with the air and were wholly lost to sight.*

(c) *And when the long grass rustled near, Beneath some hastening tread, He started up with a quivering ear, For he thought 'twas the step of his master dear*
Returning from the dead.

9. Parse the italicized words in the last question.

CLASSICS.

G. H. ROBINSON, M.A., TORONTO, EDITOR.

BRADLEY'S ARNOLD.

Exercise 35 A.

1. Fili tuo jam diu familiarissime utor, qui mihi ingenio potius ac virtute quam vel vultu vel corporis habitu patris esse similis videtur. 2. Nolite eum qui Deorum (immortalkium) beneficiis tam bene tam prudenter usus est (or sit) merito honore ac laude privare. 3. Facere non possum quin tua opera credam factum esse ut hoc periculo defunctus sim. 4. Omnes qui te salvum volumus hoc unum optamus, ut liceat tibi magistratu isto cum dignitate, cum emolumento tuo, fungi; omnes probitate tua ac modestia confidimus, omnes (in) amicitia tua gloriamur. 5. Tuo fretus subsidio, eos

qui contra regem suum arma sumpserant, gravi supplicio afficere ausus sum. 6. Sibi semper confidebat, et in termini fortuna et exiguo victu suis rebus contentus esse quam alienis opibus niti maluit. 7. Omnibus rebus quibus ad vitam opus est liber carere, quam in servili conditione divitiis circumfluere maluit.

Exercise 35 B.

1. Pollicetur omnia se nobis quae opus sint suppeditaturum. 2. Consulto magis nobis quam properato opus est; haec enim victoria vereor ne nimio nobis constiterit. 3. Patre tuo, viro praeclarissimo, adolescens amico usus sum (or utebar); singulari ille ingenio fuit, summa virtute (or optimis moribus). 4. Qui patrem suum occiderunt et contra regem conjuravere, eos gravissimis se suppliciis affecturum esse sperat. 5. Qui vereor ne miseratione tanta atque venia, quanta hodie ei opus est, parum dignus videatur. 6. Patris mei fortuna nihil unquam beatius concipere animo possis; qui ita summo magistratu functus est ut domesticae vitae dulcedine frueretur. 7. Tua fretus benevolentia, literis, quas ad me per filium meum misisti, uti non dubitavi. 8. Num quisquam hoc homine laude dignior, supplicio indignior potest esse.

Exercise 44.

1. In hac tanta trepidatione ac tumultu, Imperator a sinistro cornu cum legatis conspectus est. 2. Jam ab hostium equitatu securus erat, et adhortantis vox prae laetantium et exultatione clamore vix audiri potuit. 3. Vereor ne de exercitu nostro actum sit; dies continuos decem a re frumentaria magnopere laboratum est; a fronte, a latere, a tergo instant hostes; omnes finitimae nationes in armis sunt; nusquam spes auxilii; equidem vero in his tantis periculis de summa re desperare nolo. 3. Confestim a proelio, productos captivos caedunt; a duce incipiunt; nulli parcitur; omnes ad unum trucidantur. 4. A te igitur incipiam, cives tuos pro aris et focus pugnare flagis; idem prae te fers in fines nostros incursiones eos saepe fecisse, et nullo laessente, nullo re pugnante, agrum nostrum ferro et igni popu-

latos esse. 5. Adolescentem hunc a puero notum habeo; et pater ejus, et ipse vivo patre tuo saepissime apud me commorati sunt; nec quidquam ei vel a doctrina vel a natura deesse arbitror. 6. Proea quam mihi civis mei demandaverunt potestate, eos qui bene de republica meriti sunt praemiis sum affecturus, de ceteris pro delictis poenas sumam. 7. Tibi, quantum in me erit, opem feram, sed vereor ne de spe tua actum sit. 8. Nolim te de spe tua dejicere, sed frater tuus vereor ne infecta re redierit. 9. Fortissimum se ut in re tam trepida, praestitit, et omnes ei debemus pro ejus in nos et in rempublicam meritis gratiam ferre. 10. Omnes quae in oculis sunt spectare oportet; erebus futuris pendere nihil predest.

EDUCATION DEPARTMENT,
ONTARIO.

MIDSUMMER EXAMINATIONS, 1886.

Second Class Teachers.

GEOGRAPHY.

Examiner—J. J. Tilley.

NOTE.—Candidates will take only six questions, but of these the first and sixth must be two. Questions of equal value.

1. Compare the natural commercial advantages of the different continents.
2. Name the different functions fulfilled by mountains, in the economy of nature.
3. Describe the Trade Winds and account for their existence.
4. Account for the difference between the climate of Labrador and the climate of Ireland.
5. Where are the following, and with what events are they associated in history:—Corunna, Tel-el-Kebir, Vicksburg, Ridgeway, Orleans, Londonderry, Shrewsbury, Sedan?
6. Between what principal towns and cities in Ontario and in the United States is commerce carried on, and what commodities are exchanged?
7. (a) Account for the variation in the length of our days and nights.
(b) At 12 o'clock p.m. of midsummer to an observer 23½ degrees from the North Pole, where will the sun be?

(c) If a man were to travel around the earth in just one year, in what direction must he go to have 366 days in that year? Explain.

8. Where, and for what noted, are:—Palermo, Basle, Hull, Odessa, Toulon, Cardiff, Bologna, Cracow, Nottingham, Cronstadt, Funchal, Tiflis, Mandalay, Beyrout, Lahore, Balkh, Tokio, Fez, Monrovia, Auckland?

Special Paper for Second Class Candidates not taking the Commercial Option—equivalent to Third Class Paper.

BOOK-KEEPING AND WRITING.

Examiner—Cornelius Donovan, M.A.

NOTE.—The value of the Writing will be estimated from the work as a whole, and from the work on No. 4 in particular; and 40 marks additional will be allowed as the maximum in Writing.

1. State what is meant in the language of Book-keeping by the terms:—Assignment, Balance of Trade, Concern, Embargo, Hypothecate, Liquidate, Letter of Credit, Pro-test, Tariff. [10.]

2. Of what does a business transaction consist?

In a strictly cash business what accounts only are necessary? [5.]

3. Journalize:—

(a) I lost \$20.00; paid for advertising loss \$1.00; paid finder for returning me the money \$1.50.

(b) Dunne buys from me: 10 Hhds. N. O. Molasses 625 gals. at 40c.; 20 Hf. Ch. Ool. Tea, 1,000 lbs. at 50c.; 17 Bags Rio Coffee, 1,500 lbs. at 16c. He pays \$500 in cash, gives his note for \$300, and pays the balance by an order on Thompson, which Thompson accepts.

(c) Dunne pays his note before maturity, and I allow him a discount of \$4.00. [15.]

4. Referring to No. 3:—

(a) Write the Advertisement, the Note and the Order.

(b) Make out Dunne's bill of goods in proper form, and use it as a specimen of your method of folding and filing business papers.

(c) Write as for Ledger use, the titles of the different accounts named in No. 3.

(d) Write a letter of introduction incurring liability. [25]

5. What are the different senses in which the expression "Discounting a Note" may be taken? Name the principal parties to a Promissory Note and state their respective obligations. [10.]

6. Give Day Book entries for the following:

(a) Merchandise Dr.	\$1,000	
To Bills Payable		\$600
" Cash		400
(b) Cash Dr.	\$1,018	
To Bills Receivable		\$1,000
" Interest		18
(c) Loss and Gain Dr.	\$150	
Cash		100
To Bills Receivable		\$250
		[15.]

7. Give the principal means of detecting errors in posting. Briefly state how you would correct errors in the Day Book, Journal and Ledger, respectively. [10.]

8. In balancing his books what facts must the merchant take into consideration in order to obtain a just view of the state of his affairs? [10.]

PRINCIPLES OF READING AND ORTHOEPY.

Examiner—J. Dearness.

1. "Mr. Hastings," he says, "could not himself dictate to the Nabob, nor permit the commander of the Company's troops to dictate how the war was to be carried on." No, to be sure. Mr. Hastings had only to put down by main force the brave struggle of innocent men fighting for their liberty. Their military resistance crushed, his duties ended; and then he had only to fold his arms and look on while their villages were burned and their children butchered. Will Mr. Gleig seriously maintain this opinion? Is any rule more plain than this, that whoever voluntarily gives to another irresistible power over human beings is bound to take order that such power shall not be barbarously abused?

(a) What is the ruling feeling in "No

. . . butchered," ll. 4-9; and how should it be expressed? [4.]

(b) Is "himself" (l. 1) emphatic? Give reason for your answer. [2.]

(c) How would you in reading show the connection between "dictate" (l. 2) and its objective clause? [2.]

(d) Mark the inflection on "crushed" (l. 7), "opinion" (l. 10), "abused" (l. 14). Give reason in each case. [6.]

(e) Separate the grammatical (or accidental) groups of words in the last sentence ("Is . . . abused"), and underline the emphatic word or words in each group. [5.]

2 *Cassius to Brutus*:

For once, upon a raw and gusty day,

I rather tell thee what is to be feared.

Than what I fear, for always I am Cæsar.

(a) What is the predominant passion in Cassius's speech? In Cæsar's? What is the natural expression of each in voice and countenance? [10.]

(b) In "For once . . . point?" ll. 1-5, mark the pauses and the modulations of pitch and inflection. [5.]

(c) Contrast as to pitch and movement lines 12 and 22, and as to stress, "Help" and "lean." [6.]

(d) In reading, how can the relation of "I" (l. 13), be shown? Deduce the general rule for reading the simile. [4.]

(e) Discuss which requires more emphasis, "great" or "observer" (l. 29); "is feared" or "be" (l. 38); the first "I" or "fear" (l. 39). [6.]

(f) Mark pitch, tone, movement, emphasis and inflection of "For always I am Cæsar." [5.]

3 (a) Spell phonetically: mesne, whoop, ghoul. [1½]

(b) Divide into syllables, accentuate, mark the sound of the vowels and of the italicized consonants:—

accountred, plunged (as heard in line 6, No. 2), chicane, palanguin, Asiatic, complaisant, allies, indiscernible, incognito, orison, horizon, lutanist, column, sepals. [14]

NOTE.—In indicating the sounds of letters the candidate is recommended to use phonetic spelling. If he uses diacritical marks

other than the long (-) short (v), and obscure (.), he must give the key to such other marks. (60 marks will be counted a full paper.)

PRECIS WRITING AND INDEXING.

Examiner—Cornelius Donovan, M.A.

1. Give the sense of the following passage in as few words as possible :

That it is hard to brave a laugh—this is not disputed. That there is a power in sarcasm which may make the condition of the Christian a condition of persecution—this is not disputed. But when the battery of jest and contempt that is brought to bear on him makes him shrink ashamed of his profession, we cannot accept the difficulty of the encounter as an apology for his defeat. We really want terms in which to express our sense of the weakness and infatuation of men who, quite aware that they have right on their side, and thoroughly persuaded that reason gives an unreserved verdict in their favour, are nevertheless abashed and overcome by the ridicule of some thoughtless jester, whose intellect they probably hold cheap, and whose good opinion they consider valueless. [10.]

2. Write a Précis of the following document:—

OFFICE OF THE
PROVINCIAL BOARD OF HEALTH,
TORONTO, July 17th, 1882.

DEAR DOCTOR.—You may have observed that the Provincial Board of Health, in common with many Boards in the United States, has decided upon publishing a Weekly Report of disease prevailing in the different parts of the Province, noting, at the same time, the accompanying meteorological and other conditions.

In order to make such reports of any real value in investigating the causes of disease, it will be necessary for the Board to appoint, in various localities, correspondents whose weekly returns may enable it to deduce practical conclusions therefrom.

To this end the Board has addressed this letter to a number of medical practitioners throughout the Province, and it requests you to consider whether you will accept the position of correspondent to the Board from your district.

Leaving out of view the bearing of the proposed work upon the question of Sanitary

Science, and looking at it from a purely professional standpoint, the investigations to be made as to the causes and nature of disease will be as important to medical practitioners as many others in which they are engaged and to which they gladly devote more time. The filling up of the blank forms will require only a few minutes each week; and should you be willing to devote that time to it, be kind enough to inform the Secretary at once, so that there may be sent to you stamped forms similar to the one enclosed, and a blotter for your convenience and subsequent reference. Should you decide that you cannot do so, you will confer a favour by informing the Board of some medical practitioner in your locality who, in your opinion, would be willing to undertake the work.

The reports and remarks of correspondents will be treated as confidential, a general average of all the reports being published, and the Board exercising discretion in mentioning the names of particular localities.

Although this work, like that of the Meteorological Reporters in Ontario and of the Disease Reporters in many States of the Union, is done gratuitously, yet this Board trusts that the measure of good accruing from this scheme will be such as to encourage it to expect, in the near future, greater pecuniary facilities for making the reports, and the results to be obtained therefrom more nearly perfect.

Trusting that you may find it convenient to co-operate with the Board in this matter,

I have the honour to be, Sir,

Your obedient servant,

P. H. BRUCE,

Secretary.

[25.]

3. Show how you would index the contents of the foregoing document. [10.]

4. Give specimens of your method of indexing, (a) out-going letters, (b) letters received, and (c) bills or accounts, so that you could make prompt reference to any particular document. [15.]

ENGLISH COMPOSITION.

Examiner—J. E. Hodgson, M.A.

1. Distinguish: *stationery, stationary; relic, relict; gentle, genteel; metal, mettle; kind, kindly* (adj.); *manly, manful; bravery, audacity; morals, manners; bring, fetch; converse, contrary*. [5]

2. About thirty years before this time, a Mahomedan soldier had begun to distinguish himself in the wars of Southern India.

His education had been neglected; his extraction was humble. His father had been a petty officer of revenue; his grandfather a wandering dervise. But though thus meanly descended, though ignorant even of the alphabet, the adventurer had no sooner been placed at the head of a body of troops than he approved himself a man born for conquest and command. Among the crowd of chiefs who were struggling for a share of India, none could compare with him in the qualities of the captain and statesman. He became a general; he became a sovereign. Out of the fragments of old principalities, which had gone to pieces in the general wreck, he formed for himself a great, compact and vigorous empire. That empire he ruled with the ability, severity and vigilance of Louis the Eleventh. Licentious in his pleasures, implacable in his revenge, he had yet enlargement of mind enough to perceive how much the prosperity of subjects adds to the strength of governments. He was an oppressor; but he had at least the merit of protecting his people against all oppression except his own. He was now in extreme old age; but his intellect was as clear, and his spirit as high, as in the prime of manhood. Such was the great Hyder Ali, the founder of the Mahomedan kingdom of Mysore, and the most formidable enemy with whom the English conquerors of India have ever had to contend.

(a) Give, in your own words and as briefly as you can, the substance of this paragraph. [20]

(b) Explain the terms "balanced" and "periodic," as applied to sentences. [4]

3. Re-write the following sentences, paying special attention to the correction of errors in the use of capitals, punctuation, the use and the order of words:—

(a) the author has felt that clergymen more than those of other professions will read this book [3]

(b) the theory that land is a boon of nature to which every man has an inalienable right equal to every other person is not new [4]

(c) president Johnson has suspected the

execution of the sentence of Mrs. Bessie Perrin of Baltimore for disloyalty during her good behaviour [3]

(d) not that a sunbeam would have been so foolish as to have come in it would have known how much it would have been out of place [3]

(e) to overbear such men is the highway to put an extinguisher on the Christianity of our land [3]

(f) but this even did not retard the prosperity of the place its progress has been continuous and uninterrupted and as in the past so in the future this city is destined to exercise an important influence either for good or evil throughout the world. [5]

4. Write a short essay on *one* of the following subjects, paying special attention to the topics enumerated:

(a) THE ROHILLAS: their origin and character; the object, the method, and the results of their spoliation.

(b) NUNCOMAR: his character; the grounds of his quarrel with Hastings; the charge brought against him; his trial; his sentence; his demeanour whilst awaiting execution; the reception of his death. [50]

BOOK-KEEPING.

Examiner—Cornelius Donovan, M.A.

1. (a) What is meant by negotiable paper? What does it embrace?

(b) State the nature of Bonds, Mortgages, Debentures, Power of Attorney. [10]

2. What are the original parties to a Draft called?

(a) Brown of Toronto gives Smith a Draft on Green of Hamilton, for \$500 payable at sight. Write the Draft.

(b) The Draft has been returned to Brown as protested for non-acceptance. Explain this expression. [10]

3. Journalize in full:

(a) Borrowed from Bank \$500 for 2 months; gave in payment note for the amount, with interest at 7 per cent. per annum.

(b) White & Co., who owe us a balance of \$1,975, have compromised with their credi-

tors at 75 cents on the dollar; we have received that portion of their indebtedness in cash.

(c) Wm. Jones, against whom we hold a note for \$300, on which has accumulated \$17 interest, has permitted the note to go to protest, we paying the protest fees, \$1.75. in cash.

(d) We have compromised with Wm. Jones for the note and interest above mentioned, receiving in full payment therefor, in cash, $33\frac{1}{3}$ per cent. of the face of the note.

(e) Discounted for Robertson & Co., their note for \$3,000 @ 90 days; discount off at 8 per cent.

4. Post the items (c) and (d) in No. 3, using properly ruled spaces. [12]

5. State the object and briefly describe the process of closing the Ledger. [10]

6. State the chief provisions of a Partnership Contract. Name at least three ways by which a Partnership may be dissolved. If a salary is allowed one of the partners, by whom is it paid? [9]

7. Johnson's account on our Ledger stands as follows:

Debit Side.

April 1, 1885, Mdse. at 3 mos., \$375;
May 17, 1885, Mdse. at 4 mos., \$600.

Credit Side.

July 1, 1885, Cash \$200; July 15, 1885, Cash \$100.

Show by equation when the balance of this account is due,—giving full work.

8. Write the following documents:

(a) An advertisement applying for a situation as accountant.

(b) A circular to your customers announcing removal of business to more commodious quarters, and inviting them to visit you.

(c) A telegram not exceeding ten words to be sent to Brown & Co., Montreal, ordering that firm to send you by express four cases of gaiter boots, and to draw on you at 10 days' sight. [9]

HISTORY.

Examiner—Jas. F. White.

NOTE.—Only six questions are to be answered; of these 7 and 8 must be two.

1. State in detail the great changes that marked the Revolution of 1688-9. [16]

2. Give an account of Marlborough, showing his character, the objects for which he fought, the nations allied against him, and the results of his wars. [16]

3. Describe the social, political and intellectual condition of England under Anne. [16]

4. Write a paper on the life and times of Chatham. [16]

5. Trace the growth of British power in India under George II. and George III. Relate with especial fullness the parts played by Clive and Hastings. [16]

6. Sketch the literary history of England in the early part of the 19th century. Refer especially to the life and work of Coleridge. [16]

7. Describe the Constitution of the branches of the Dominion Government. What are the powers and functions of the Parliament of Canada as distinguished from those of the Provincial Legislatures? [18]

8. Give the chief causes and the effects of the Rebellion of 1837. [18]

DRAWING.

Examiner—J. A. McLellan, LL. D.

Ruling the Paper.

Divide a sheet of foolscap into three equal parts by two horizontal lines. Bisect the top and bottom divisions by a vertical line.

Adjustment of Work.

Place the Freehand in the left subdivision, and the Geometry in the right subdivision of the top space; the Perspective in the middle division, and the Designs in the subdivisions of the bottom space.

Freehand (No perspective effect). *Time*, 15 minutes.

Make drawings showing the size and shape of the back, side and end of a book (say Fourth Reader), 6 inches long, 4 inches wide and one inch thick, using a scale of $\frac{1}{4}$ inch

to the foot. Details of design on cover at pleasure. [20]

Geometry.—Time, 15 minutes.

(a) Upon a horizontal line 2 inches long, construct a square.

(b) Bisect one of its angles.

(c) Upon its upper side construct an isosceles triangle having a vertical angle of 30 degrees.

(d) Upon the right hand side of the square, construct a triangle similar and equal to half the square; and in this triangle inscribe a circle. [20]

Perspective.—Time, 30 minutes.

Height 6 feet, distance 16 feet, scale $\frac{1}{4}$ inch = 1 foot.

(a) Place in perspective a block 6 feet square, 2 feet thick, lying on one of its square faces, having two of its edges perpendicular to the picture plane, and its nearer left hand corner 2 feet to the left, and 2 feet back from the picture plane. [40]

(b) Place centrally upon this block, a cylinder 4 feet in diameter, 4 feet high, having its axis vertical. [40]

(c) Make the top of the cylinder the base of a cone 4 feet high. [5]

Design.—Time, 30 minutes.

(a) Draw a regular pentagon confined in a circle 3 inches in diameter. Join by straight lines its alternate corners, thus forming a five pointed star; finish this star, showing it as formed by an interwoven band $\frac{1}{8}$ inch wide. [10]

(b) Draw two horizontal lines, each 4 inches long and 2 inches apart. Divide the space between them into contiguous equilateral triangles, as the basis of a design for a border suitable for a wall paper. [25]

CHEMISTRY.

Examiner—John Seath, B.A.

NOTE.—The candidate is requested to arrange, as far as practicable, the different parts of his answers to Nos. 1, 2, 4, 5, 6, and 7, under the following heads: (1) EXPERIMENT, (2) OBSERVATION, and (3) INFERENCE. Answers to be as concisely worded as possible.

1. How would you demonstrate with $KClO_3$ the difference between physical change and chemical change? [6]

2. With some water containing CO_2 in solution, is shaken up a mixture of pure sand and $NaCl$.

(1) How would you separate these four substances? [10]

(2) How would you prove that you had separated them? [10]

3. An organic body which is known to contain only C, O, and H, gives on analysis 27.58 per cent. of O and 10.35 per cent. of H. Its vapour density is 58, that of H being unity. What is its molecular formula? [12]

4. You are given HCl and NH_3 (each in the form of a gas), litmus paper, and turmeric paper, and pure distilled water. How would you demonstrate the nature and properties of an acid, an alkali and a salt? [10]

5. A liquid is known to contain H_2SO_4 , HCl , KHO , or NH_4HO . Give a simple mode of determining which it is. [10]

6. How would you demonstrate

(1) The resemblances and differences between H and Cl ; [10]

(2) The effects of heat upon a mixture of 4 vols. of H , one vol. of O , one of Cl , and one of N ? [12]

7. The water of a well is supposed to be contaminated by sewage. Describe the means you would take to determine the question. [12]

8. (1) A glass rod moistened with strong H_2SO_4 is held very near a mixture of powdered $KClO_3$ and dry loaf sugar, but so as not to touch it.

(2) A glass rod moistened with strong H_2SO_4 is brought into contact with the same mixture.

Describe and explain what happens in each case, and state the general conclusion you would base on these and similar experiments. [8]

We invite special attention to THE MONTHLY'S new clubbing list. Do not forget the subscriptions.

MENTAL ARITHMETIC.

Examiner—J. J. Tilley.*Questions of equal value.*

1. Find the annual income from \$20,240 invested in 6 per cent. stock at 8 per cent. discount.

2. A, B and C can do a piece of work in 20 days which B can do in 40 days and C in 60 days. In what time can A do it?

3. How many yards of paper, 27 inches wide, will cover the walls of a room 15 ft. long, 12 ft. wide, and 12 ft. high?

4. I sell cloth at a profit of 20 per cent.; had it cost \$2 per yd. more than it did the same selling price would have given a loss of 25 per cent.; find the cost.

5. In what time at 8 per cent. simple interest will the amount be 2½ times the principal?

6. The difference between the interest and the true discount on 232 for 2½ years at 6 per cent. is \$5.12; find the principal.

ENGLISH LITERATURE.

*Macaulay.**Examiner*—John Seath, B. A.

The place was worthy of such a trial.
 . . . shone round Georgiana, Duchess
 of Devonshire.

1. What is the main subject of this paragraph? What sentences contain the chief subordinate subjects? [4]

2. Show how the author observes the principles that govern the construction of a paragraph, referring especially to (a) unity, (b) continuity and (c) variety. [6]

3. Account for the introduction of so many historical and biographical details, and for the character of these details. [3]

4. Make such comments on the historical and biographical references in ll. 35-41, and 51-61, as are *absolutely* necessary for the proper explanation of the author's meaning. [8]

5. Show how the author applies the principle of Contrast in ll. 30-61. What is the effect of the device? [6]

6. Comment generally on the length and the other characteristics of the sentences,

and explain the effect thereof upon the style. [5]

7. Point out three marked examples of the repetition of words for different purposes, explaining the purpose in each case. [6]

8. Point out three marked examples of words placed in unusual positions for different purposes, explaining the purpose in each case. [6]

9. Illustrate from the above extract Macaulay's fondness for a climax of sound. [3]

10. Comment generally on the artistic use made of the adjective in the above extract. [5]

11. Justify the order of the particulars in ll. 2-9, and compare the order of the particulars in ll. 11-24 with that in ll. 30-61. [8]

12. Show, with regard to "resounded," l. 2; "acclamations," l. 3; "absolution," l. 5; "resentment," l. 7; and "confronted," l. 8; how light may be thrown on the exact force of a word (a) by means of its etymology, and (b) by distinguishing it from its synonyms. [10]

13. Give the terms that describe the style of the above extract, and explain their application. [5]

14. Illustrate from the above extract the characteristics of Macaulay's style (a) which we should imitate, and (b) which we should avoid. Give, in each case, the reasons for your opinion. [8]

Coleridge.

1. Show to what extent the form and the substance of the selections you have read from Coleridge are the result of the influences that affected literature during his lifetime. [10]

2. Illustrate, by two marked examples in each case, the way in which Coleridge heightens the effect of his descriptions (a) by dramatic touches, and (b) by the use of contrast. [6]

3.

And now the storm-blast came and he
 Was tyrannous and strong;
 He struck with his o'ertaking wings,
 And chased us south along.

With sloping masts and dipping prow,
 As who pursued with yell and blow
 Still treads the shadow of his foe,

And forward bends his head,
The ship drove fast, loud roared the blast,
And southward ay we fled.

(a) Develop the force of the personification as expressed by "tyrannous," "struck," "overtaking wings," and "chased." [8]

(b) In the same way develop the significance of each point of the simile. [6]

4.
Nor dim nor red, like God's own head,
The glorious Sun uprist:

As idle as a painted ship
Upon a painted ocean.

(a) Develop the force of the following expressions: "averred," "The furrow followed free," "Down dropt the breeze," and "stuck." [8]

(b) Develop the significance of each point in the similes. [6]

(c) Justify the use of the irregular forms of expression. [3]

(a) A later reading for l. 8 is "The furrow streamed off free." Explain the reason for the change, and for the continued preference for the one in the extract. [6]

(c) Show the relation of ll. 5 and 6 to the development of the plot of the poem. [3]

(f) Comment on the transition from ll. 7 and 8 to ll. 9 and 10, explaining the artistic reason for the peculiarity. [3]

5. By means of the most marked examples in 3 and 4 above, show how the poet secures (a) lingual melody, (b) vividness of presentation, and (c) force of expression. [9]

6.
Verse, a breeze mid blossoms straying,
Where Hope clung feeding, like a bee—

Life is but thought: so think I will
That Youth and I are house-mates still.

(a) Develop the significance of each point in the metaphors and similes in ll. 1-5, 12-15, and 18-22. [18]

(b) Explain clearly the meaning of ll. 25-38. [10]

(c) Give in a few sentences, without the poet's amplification, the meaning of the above extract, adding the substance of the lines that follow, and explaining fully the meaning, and the relation to the context, of

Dewdrops are the gems of morning,
But the tears of mournful eve. [10]

(d) State the chief shades of feeling that should be expressed in reading the above, showing the significance of the noteworthy punctuation marks in ll. 2-7 and 25-30. [8]

(c) What passage in the above extract seems to you to be the finest? Assign reasons for your answer. [6]

NUMBER AND ARITHMETIC.

It may seem that the method of teaching all the operations together is here violated. By no means. The numbers and their relations of uniting, separating and parting have already been taught. The question before us now is one of associating the ideas of numbers and their relations with written language. The necessity of teaching one idiom at a time is apparent. Those who contend that the different operations should not be taught together have in mind probably the language without the thought, and from this standpoint their deduction is correct.

TEACH the language of multiplication next. It is an open question whether this sign \times should be retained. There are many slight obstacles in the way of its banishment. 1, for one, would not use it.

Class at the blackboard as before. Teacher shows five objects and five objects. Pupils write:

$$5 + 5 = 10.$$

4 sticks and 4 sticks are shown; pupils write:

$$4 + 4 = 8.$$

Teacher—How many fives did you write? (holding 5 sticks and 5 sticks.)

Pupils—Two fives.

Teacher—How many fours?

Pupils—Two fours.

Teacher—Write $5 + 5$ in another way. Pupils may write two fives are 10. Write it using figures, thus: $2 \text{ } 5\text{'s} = 10$, and $2 \text{ } 4\text{'s} = 8$, may be written.

Show sticks or other objects separated into equal numbers, and have pupils write, as before:

2 2's 4.
 4 2's 8.
 3 3's 9.
 2 4's 8.
 2 5's 10.

Follow with oral problems, written problems, problems in books, then figures, without problems.

In the same way the written language of division may be taught. Show a number of sticks; separate the number into equal numbers, and ask the pupils to write, without any particular suggestions. The results would be worth noticing, for "divided by" is an awkward, misunderstood phrase. Guesses at some attempts:

3 2's in 6.
 There are 3 2's in 6.
 6 has 3 2's.
 In 6 there are 3 2's.
 6 divided by 2 = 3.

Gradually pupils may be led to the conventional form, $6 \div 2 = 3$.

If there is a remainder, as in 5, have pupils write: $5 \div 2 = 2$ and 1 (meaning 2 2's and 1). The quotient in division is an elliptical phrase. There will be no trouble in thinking if pupils have the fact that *division is finding the equal numbers in a number, and nothing else*, fixed in their minds by repeated observations. Follow the separation of numbers of objects into equal numbers, by oral problems, requiring such separations. Then, as before, use written problems, and follow with printed problems, and figures not applied to things.

LAST of this line comes partition. Hold

THE report recently issued by Mr. W. E. Tilley, I. P. S., Durham County, is almost all that such reports ought to be. It is a new departure, containing exactly that kind of information that both teachers and trustees require—the former, that they may engage in new situations wittingly with

up 6 sticks; separate them into two equal parts; show one part. Write what part this is (3 sticks) of 6 sticks.

One-half of 6

may be written. Change the one-half to $\frac{1}{2}$, and have pupils write

$\frac{1}{2}$ of 6 = 3.

By the same process have them write

$\frac{1}{2}$ of 4 = 2.

$\frac{1}{3}$ of 6 = 2.

$\frac{2}{3}$ of 6 = 4

$\frac{1}{2}$ of 10 = 5.

$\frac{1}{10}$ of 10 = 2.

$\frac{1}{3}$ of 10 = 3.

Follow with oral, written, and printed problems, and last of all figures for review.

NOW unite all these idioms in one exercise.

Show 5 sticks and 4 sticks, uniting them.

Show 8 sticks and separate them into 3 sticks and 5 sticks. Show 5 sticks and 5 sticks.

Teacher—Write this two ways.

Show 10 sticks and separate them into twos. Show 8 sticks and separate them into halves, holding up one-half.

Work as it should appear on the blackboard

$5 + 4 = 9,$

$8 - 3 = 5,$

$5 + 5 = 10,$

$2 \text{ } 5\text{'s} = 10,$

$10 \div 2 = 5,$

$\frac{1}{2}$ of 8 = 4.

Follow this as before with problems of all kinds, and then with quick repetitions of figures until the facts sink in to the automatic. It will be seen that this written work includes every table in ten.

a probability of more permanency, and the latter that they compare themselves and their important trusts with others in the county. Size, furnishing and appliances of school-houses are given, also condition of grounds, outhouses, pumps, etc., and some space is devoted to the assessed value of each section, and the salary paid.

CONTEMPORARY LITERATURE.

THE REPORT OF THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION. New York.

CLASSICS FOR CHILDREN. I. A First Reader (Introductory to the Series). II. Plutarch's Lives; III. Rascals. Boston: Ginn & Co.

These books are valuable additions to this excellent series.

FIRST NATURAL HISTORY READER. By the Rev. J. G. Wood, M.A. Boston: School Supply Co.

Some thirty-four lessons on familiar domestic animals make a lesson-book which will give children some idea of many interesting facts in natural history.

TIMON OF ATHENS. Edited, with notes, by Wm. J. Rolfe, A.M. New York: Harper & Bro. 175 pp.

The convenient and valuable editions of Shakespeare's plays, with notes by Mr. Rolfe, are too well known to make any extended notice necessary. Mr. Rolfe's taste and judgment, as well as his sympathetic appreciation of the text and his knowledge of a student's needs, are apparent in his work.

SPECIMENS OF ENGLISH PROSE STYLE. From Mallory to Macaulay. Selected and annotated. With an introductory essay by George Saintsbury. London: Kegan, Paul, Trench & Co; Chicago: Jansen, McClurg & Co. 367 pp.

The author has attempted in this volume to give prominence to the historic development of English prose, and has been eminently successful. The introductory essay is an admirable piece of work, and displays rare skill and taste. Mr. Saintsbury's standard is the simple prose of Addison and earlier writers, rather than the brilliant pages of Macaulay. Each selection is accompanied by a biography of the author—written in fifty or sixty words—and at the end appear notes on the right things. Mr.

Saintsbury's book is almost our ideal of a prize in English or a gift for an English scholar.

ALLEN & GREENOUGH'S NEW CICERO. Boston: Ginn & Co. \$1.40

In this edition the thirteen orations are arranged chronologically and connected by introductions, forming in themselves a historical study of the period. Maps, notes, vocabulary and illustrations are given, and we can speak most highly of this work, in which sound scholarship and careful research are displayed.

LECTURES TO KINDERGARTNERS. By Elizabeth P. Peabody. 226 pp.

These lectures, some eight in number, were delivered by Miss Peabody to training classes of Kindergarten teachers during the last nine or ten years, and are published by request, as Miss Peabody is unfortunately no longer able to deliver them *in vivo*. Our readers will find them thoughtful and sympathetic presentations of the spirit and methods of Kindergarten education.

FORM DISCIPLINE. By A. Sidgwick. London: Rivingtons, 49 pp. 1s., or cloth, 1s. 6d.

A reprint of a lecture delivered by Mr. Sidgwick for the Teachers' Training Syndicate at Cambridge. The author is a Fellow and Tutor of Corpus Christi College, and was, for fifteen years, one of the masters at Rugby School. We strongly urge our readers to see it for themselves.

OUR GOVERNMENT. By Prof. Macy, of Iowa College. Boston: Ginn & Co. 250 pp. 88 cents.

"The average American lives under not less than five institutions called Governments." A view of all these is given in the present book, along with a historical sketch of the development and the scope of each. "Our Government" is a work of merit, and we

should judge of no little value to "the average American citizen."

- I. THROUGH A MICROSCOPE. pp. 126.
 II. THE MAKING OF PICTURES. pp. 131.
 III. ENTERTAINMENTS IN CHEMISTRY. pp. 79. Boston: The Interstate Publishing Co. 60 cents each.

Three pleasant and profitable little books.

The first-mentioned is perhaps the most fascinating for boys and girls, and is the work of Mary Treat, Samuel Wells, and F. L. Sargent.

The second is a series of twelve talks upon art and the principles which underlie the various branches and processes of art.

The third (Prof. Tyler), in spite of its title, is very instructive. The experiments, we notice, are all warranted to be safe.

PAPERS ON INORGANIC CHEMISTRY. By George E. R. Ellis, F.C.S. London: Rivingtons. pp. 146. 2s.

An excellent book for science students, containing some seven or eight hundred questions, results being given to those which admit of numerical answers, and many being fully explained. The questions are miscellaneous and have been obtained from different sources; they are most carefully arranged in a progressive series of a hundred papers.

- I. ELEMENTARY ALGEBRA. With Answers. By H. S. Hall, M.A., of Chifton College, and S. R. Knight, B.A., late of Marlborough College.
 II. ELEMENTARY ALGEBRA. With Answers. By Charles Smith M.A., of Sidney Sussex College. London: MacMillan & Co.

We have pleasure in speaking highly of both these works. In the former our mathematical friends will find some 3,500 questions, accompanying and illustrating a clear and careful presentation of the various parts of elementary algebra. In the latter, we specially noticed papers of miscellaneous examples. Mr. Smith pays a good deal of attention to the logical ground-work of the subject.

SHELDON'S ELEMENTARY ARITHMETIC. Illustrated. New York: Sheldon & Co.

Possesses several good features, and has a large number of practical questions, admirably suited for young children.

ELEMENTS OF ANALYTIC GEOMETRY. By Prof. Wentworth, of the Phillips Exeter Academy. Boston: Ginn & Co. pp. 221.

Intended for beginners, this book consists of chapters on The Straight Line, The Circle, Systems of Co-ordinates, etc. A large number of problems is appended to each chapter, also answers and, in some cases, solutions.

ASTRONOMY BY OBSERVATION. New York: D. Appleton & Co.

The author, Miss Eliza A. Bowen, of Beechcroft School, Tennessee, has prepared a good book on this subject for High Schools and Academies. It aims at teaching the constellations, etc., and leading the student to think and understand what he can see. The star-maps and numerous illustrations are remarkably good.

THE ELEMENTS OF ALGEBRA. With numerous examples. By J. A. McLellan, M.A., LL.D. 328 pp. Price 75 cents. Toronto: Canada Publishing Company.

THE HIGH SCHOOL ALGEBRA. Part I. By W. J. Robertson, B.A., LL.B., Mathematical Master, Collegiate Institute, St. Catharines, and I. J. Birchard, M.A., Ph.D., Mathematical Master, Collegiate Institute, Brantford. Toronto: William Briggs, 78 and 80 King St. East, 1886. 338 pp. Price 75 cents.

We have special pleasure in noticing these two books on Algebra; they are printed and published in Canada; the printing, paper and binding—"the whole get-up"—is highly creditable to Canadian enterprise. Both firms deserve commendation for the finished style in which they have produced these mathematical books. Still more pleasure have we in stating that clear evidence is afforded by these books, the work of Canadian graduates, first-class honorem in the department of mathematics, of careful and successful labour in the difficult under-

taking of producing a text book in Algebra. The composition of the Elementary Algebra shows unmitigated signs of haste; the algebraic element, much thought and skill. The literary part of the High School Algebra is more finished, showing traces of the "beaten oil," and the algebraic part is not inferior to that of the other book. The High School Algebra has a decided advantage in this respect—that the answers are given. Much attention comparatively is given in both of these books to "theory of divisors" and "symmetry," the author of the elementary introducing this feature at a very early stage; the authors of the High School Algebra more gradually and at a later stage. We would say that a better plan is to reserve the formal treatment of symmetry, etc., until the scholar has a fair knowledge at least of quadratic equations. This is the teaching of our experience, and this is sustained by the most recent work on Algebra published in Britain. We are much gratified by the evidence of Canadian scholarship and enterprise given by these books.

LONGMANS' SCHOOL GEOGRAPHY. By Geo. C. Chisholm, M.A., B.Sc., Fellow of the Royal Geographical and Statistical Societies. London: Longmans, Green & Co.

Parts I. and II. of this work, entitled respectively "Mathematical Geography," and "Physical Geography," are satisfactory and complete. Part III., entitled "Description of Continents and Countries," containing upwards of sixty illustrations, gives a large amount of important information. There is not too much space devoted to Canada, and the information conveyed in the space which is allowed to that country is not too accurate. But it is "illustrated" by a "Lumbering Scene," wherein are shown two miserable-looking men in fur coats, with their hands in their pockets. No member of THE MONTHLY staff has yet been able to understand the rest of the picture. We also learn (page 283) that "the Lake Peninsula, which lies between Lake Huron (with the

Georgian Bay) on the one side and Lakes Erie and Ontario on the other, has an area of *less than 20,000 square miles*, and yet, at the last census, contained about two-sevenths of the entire population of the Dominion, *even though it had not a single town with 20,000 inhabitants.*" (The italics are ours.) We shrink from the task of explaining what mistakes these are; but we extend a respectful invitation to Mr. Chisholm to come and see "the Lake Peninsula," and enjoy the luxury of feeling as the Queen of Sheba did, and we hope that our good friends the publishers will on his return issue a revised edition of their geography. An intelligent subject of the Empire stands aghast at such mistakes as those above referred to.

"WE will now resume our studies."—*Dombey & Son.*

"Go and be something logical directly."—*Hard Times.*

THE last number of the *American Bookseller* (10 Spruce St., New York,) contains an important list of educational works.

MR. JOHN LOVELL, of Montreal, has recently issued a prospectus of a *Encyclopedic Gazetteer and History of Canada*. THE MONTHLY looks forward with the greatest pleasure to the appearance of such a valuable national work, and hopes that many of its readers will send for the prospectus, and thus have full and accurate information in regard to Mr. Lovell's proposed undertaking.

IN the October number of *Shakespeariana* it is proposed to open a School of Shakespeare, under the guidance and direction of eminent Shakespearian scholars. This announcement, we are sure, will be of interest to many, and will add to the value of our esteemed contemporary. (Walnut Street, Philadelphia: \$1.50 per year.)

THE *Citizen* (D. C. Heath & Co.) is a new monthly of promise, aiming to promote "good government through good citizenship." It has an able corps of contributors, and its articles are instructive and practical.

THE *Political Science Quarterly*, another new publication, has been received with

much favour by the American press and bids fair to become indispensable to a large circle of readers.

AMONG our professional contemporaries none is more welcome than *Education*, "a monthly magazine devoted to the Science, Art, Philosophy and Literature of Education." From an article entitled "An Ideal Education of Girls" we quote one sentence: "The great problem of the present day will be solved when women learn to receive the high privileges now accorded them without losing the virtues they have inherited from the past." *Education* contains, in its seventy or eighty pages, a rich mine for the teacher.

THE *Popular Science Monthly* for September contains "Genius and Precocity" (concluded), by James Sully; "Some Outlines from the History of Education," by Prof. Benedict, and many other articles. The editor urges, in his own department of the magazine, the necessity of moral teaching in Public Schools.

AMONG the good things in the September *Eclectic* is a pleasant article on "The Secret of Yarrow," from *Blackwood's Magazine*.

IN the *Harper's Weekly* of August 28 is published a beautiful poem by Will Carleton, entitled "The Funeral." The artist who illustrates the poem depicts, with marked feeling, the bare interior of the little country church and the very attitude and expression of the old negro preacher and the little group of mourners round the tiny coffin.

THE *Overland Monthly* for September contains an interesting short story entitled "Janet Craig."

MR. HENRY JAMES has brought the "Princess Cassamassima" to Book Fifth in the *Atlantic* for September. Mr. Bishop's story, "The Golden Justice," is somewhat laboured—one turns from it with a certain sense of relief to read "The Law's Partiality to Married Women," or one of the other good articles.

ONE of the features of *Harper's* for September is an illustrated article on "Workmen in the British Parliament." The fiction of the number is attractive and varied, and there are several articles upon topics of general interest.

BUSINESS.

If you know your subscription to have expired, renew it at once. \$1 per annum is the subscription price, and there is not a teacher in Canada who cannot afford to pay that sum for a good educational paper.

Notify THE MONTHLY at once of change of post office, always giving the name of old office as well as the new.

THE MONTHLY will not be discontinued to responsible subscribers until ordered to be stopped. Bills will be rendered from time to time, and prompt payment of the same will be expected.

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men copies sent free from this office to any address.

Our readers will observe that special attention is given to examination papers in this Magazine; in many cases hints and answers are given, and for several papers solutions have been furnished to all the questions. We hope subscribers and others will show in a practical way their intelligent appreciation of the valuable work done by the editors of the different departments of THE MONTHLY.

Bound copies of this Magazine in cloth may be had from Williamson & Co., or from James Bain & Son, King Street, Toronto, for \$1.50 per copy.