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### THE

# EDUCATIONAL RECORD

OF THE

# PROVINCE OF QUEBEC.

No. 5.

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## Articles: Original and Selected.

# EXTRACTS FROM A LECTURE ON SELF-CULTURE.\*

By Dr. S. P. Robins, Montreal.

Extract 1. Derivation and meaning of the word Culture.— The word "culture" is derived by us from the French. But, inasmuch as French itself is but abbreviated Latin, less stately, perhaps, but more nimble than the language from which it is descended, we find the earliest accessible form of the word in the future participle "culturus" of the Latin verb "colere" to till. Hence sprung the Latin word "cultura," meaning the act of tillage. This, in accordance with a well-known law of modification in passing from Latin into French, exchanged its final a for the final e of the French word, its full round Latin a shrinking with time into the then French sound, which was also the Greek sound of upsilon, so that the word emerges in French as "culture" with a suspicion of sound in the final letter.

When the word emerges in literary English, written English, the struggle between the Saxon and the French pronunciations of u, of which our English spelling and pronunciation bear so many traces, issued in a compromise. The first u reverts to the short Saxon u as in cull, and the second u takes that peculiar diphthongal sound

Given before the Teachers' Association in connection with McGill Normal School, April 15, 1897.

eeu which, so far as I know, is found only in English, and which for reasons of every articulation modifies the preceding t into tch in sound. At the same time the final e has become entirely silent. Thus we have our word "culture."

I think it cannot be disputed that the primary meaning of "culture" is the act—the deliberate and purposeful act -of tillage, the act as contemplated, designed and executed in accordance with the design. "Cultura" is not the same as "cultus," though we often confound them in translation. The first is the act of tillage conceived; the second is the act accomplished. The first word evokes more definitely the scheme of tillage, the second .word rather the result of tillage. But our word culture has by a familiar metonymy widened its meaning so as to include with the process the result. In the first—the primitive sense we speak of the culture of the soil, the processes in which the soil by the labour of the husbandman is fitted to produce the crop desired. But when we speak of the culture of the nineteenth century, not only are we transferring the word from its literal application to the soil and applying it figuratively to society; but in still another way we are leaving its primitive sense. We use it not to indicate the process of cultivation by which society has come to be what it is, but to sum up the results of the influences of history, of literature, of art and of science, embodied in the aggregate habitual feelings, thoughts and manner of action of men and women in the world.

However used, then, culture means or suggests the processes or the results of husbandry, such intervention of human skill and effect as, acting with and facilitating the operation of nature, leads to the increase or development or amelioration of natural products. It recalls to us those homely but most beautiful industries which bring men into closest contact with the mother heart of nature. The word "culture" itself and all its compounds suggest nature's general forces under the control of human labour, care, skill and foresight.

To-night we are to use the word in a figurative sense. We shall have to consider fields that lie out of the purview of sense, influences other than those of sun and wind and rain, labours and results which are often insufficiently valued, because they belong to the inner world of consciousness investigated only by few. By "culture" in this

tropical sense we sometimes understand the process by which, under educative influences, and more particularly social influences, the nature of man is developed, as in the savage, unreclaimed state it could not develop, into beauty and grace and strength; sometimes we understand the beauty and grace and strength which result from the inter action of the happy educative environment. Culture is strong, robust, self-centred; but in the connotation of the word, concepts of grace and harmony are prominent: so that the word is usually employed to direct especial attention to those acquisitions which render a man an acceptable social unit. A man is not spoken of as cultured because of great learning merely. He may be a profound mathematician or an erudite and yet be an uncultured boor. Culture implies hourly personal illustration of all the refining effects of literature, art and a humane disposition. in speech and manner, which by them are rendered pleasant, graceful, polished.

Extract 2. Mental Faculties.—Our senses present to consciousness the world about us, the material universe which constitutes our tangible environment. The eye presents form. colour, size and motion. The ear presents the sounds of the world. Muscular sense reveals the resistances of bodies, their weight, their elasticity and their strength, So by these and other senses we are furnished with the manifold Intuitions of Sense. But all these are given in various orderly universal relations; relations of succession in time, relations of coexistence in space of three dimensions, relations of necessary sequence. From these relations we derive conceptions of duration, of space, of cause and effect, which, with others of like character are the so-called Intuitions of Reason. Further we are conscious of phenomena in our inmost being; of thought, of feelings and of purposes. These, as apprehended by us, are the Intuitions of Self-Consciousness. These intuitions of sense, intuitions of reason, intuitions of consciousness provide the matter of all thought. Thinking consists in storing up, reproducing, analyzing and reconstructing in new aggregates the materials of these intuitions which have been furnished by what has been called the preservative faculty of the mind.

All kinds of mental impressions endure. They endure in two ways. They continue to be felt for a short time after the exciting cause has ceased to act, as the eyes are dazzled for a moment after an electric flash has passed, or as the disturbance caused by fear does not cease as soon as the danger is over. And then they endure in this further sense that they lurk secluded below consciousness, apparently as utterly out of existence as though they had never been, yet ready to spring up to consciousness when the proper stimulus operates, as vivid as though they had never disappeared from consciousness. Memory is that conservative faculty which stores for us myriads of impressions ready to be recalled, holding them with such tenacity that some have doubted that any impression is ever wholly effaced.

By far the greater number of impressions stored in memory are, at any given moment, out of consciousness. Yet any one of them may, the next moment, come back to consciousness. How does it return? Capriciously? Or under law? Certainly under law. What then is the law? It is this, that when various impressions have been before consciousness together, then, if one of these impressions be at any time renewed in consciousness, the attendant impressions are prone to return with it. This is the law of association. It accounts for the reproductive faculty of mind.

The facts of the world are presented to us in great complexity. In many phenomena two or more senses are assaulted at once. A swinging bell at the same instant smites the ear and challenges the eye. We are endowed. however, with the power of so fixing the attention on the impressions received through one sense as to ignore those presented at the same moment by another sense. We may so steadfastly regard the form, the colour and the motion of the bell as not to observe the clangour; or, again we may so rivet attention on the sound as to see the image as though we saw it not. Further, even the impression made on one sense is usually a complex impression; so the eye observes at the same time the shape, the tints, the size and the motion of the bell, presenting necessarily the total impression. Yet the mind may so attend to one element of the impression as to ignore all the rest. The mind may so fixedly regard contour as to pass colour by, or colour as not to notice motion. This selective and directive power of the mind is its analytic faculty. By its exercise we form abstractions.

Abstractions and parts of wholes are the materials for new aggregates built up in the mind by the mind itself. This imaginative power is the constructive faculty of the mind.

The mind receives, remembers, recollects, disintegrates and reconstructs; to repeat the words already used, it has a presentative faculty, a conservative faculty, a reproductive faculty, an analytic faculty, and a constructive faculty. All these powers are not infrequently acting together in one effort of the mind. Very seldom, if ever, is one such power awake and active alone.

Extract 3. Means of Culture.—What is the apparatus of that training which we denominate self-culture? It is but one—contact with the divine thought. One, yet fourfold, because the divine thought has a fourfold expression in the cosmos accessible to us.

1st. All the glorious apparel of the material universe, its majestic arch of blue, its curtaining clouds, its deep shadowing woods, its verdant plains bestarred with flowers, its shimmering streams, its wide tempestuous seas, all are a revealing of the divine. All its forms of loveliness, all its beauties of tint, all its rythmic movement, all its melody of sound express the thought of God. Is there a Juno-like beauty in the rich-hued, full-bosomed moss-rose? Are there vestal purity and grace in the delicate curves of the lily? Is there impressive order in the march of the seasons? Is there glory in the morning, far-flaming over land and sea? Is there awful majesty in the seried host of midnight standing innumerable, rank beyond rank, marshalled in the silent abysses of space? Is there sublime wisdom in the slow, secular, purposeful, immeasurable evolution of this world and of all worlds with all their forms of insensate and of conscious life? Then the beauty, the grace, the order, the glory, the majesty and the wisdom were eternal archetypes in the mind of God; they have been transcribed by his finger in the visible creation; they are legible by us, because we too are divine; and they enrich us with their loveliness, and ennoble us by their greatness, and endow us with their wisdom as we contemplate, changing us into the likeness of the things with which we cherish companionship. That mind is beautiful which is stored with beautiful con-That mind is great which treasures sublime thoughts. That mind is wise which has studied at the footstool of eternal wisdom.

2nd. The world of human life darkens with gloom and glows with splendours of which the deepest midnight and the brightest noon-tide are but faint and inadequate types.

What horror of Egyptian night is that in which so many lives are spent? — an impenetrable blackness of sin and death, through which flit spectres born of hell, greed and lust and hate, — a night in which you hear the slow dropping of tears, the sighs of those who sorrow, the groans of those who suffer. He who, Dante-like, would rise to the height of love's Paradise, Dante-like must first descend into the Inferno of human guilt and pain, taking with him the yearning, sympathetic, helpful pity of one who, because he is human, has sinned and suffered, and who, because the divine in him has not been wholly quenched, has conquered and has been comforted. Life will, however, show him who learns from it, not alone his miseries nor even chiefly her miseries. She will show him the holy flames of family love and truth burning bright on myriads of hearths,—the sacrifices of a father's solicitude, and that fairest survival of our lost Eden, the tenderest, purest, sweetest of all earthly things, the mother love of the earth. Yes! he who looks will see in the flickering firelight of many homes little faces · pressed close to mother's cheek, little forms clustering around mother's knee, chubby arms around the necks of brothers and sisters, little heads with curls commingling leaning over the same picture books. Do not tell me that time will canker and wither this domestic love. Alas! alas! for the homes that are wrecked, for the fair hopes that founder in wild and pitiless seas. But all are not lost. There are aged parents whose declining years are comforted and sustained by the care and loving respect of manly sons and of noble There are brothers and sisters whose fraternal love is as unselfish and uncalculating as in the days of childhood, but which is stronger and closer than it could be in earlier years.

He who takes his lessons in self-development in the world of business will doubtless find there meanness, avarice, cruelty, injustice and falsehood. But his experiences will differ from mine, if he does not also find higher indebtedness, generosity, kindness, honour that never betrays a trust, and truth that neither fear nor favour can tempt to the slightest prevarication. He who studies men in the political and social world, will find too many whose public spirit and patriotism are a hollow pretence,—who flatter the populace in order to fleece and betray them,—who in municipal affairs will strip a city of its last asset

and sell for their own gain its last franchise,—who in national affairs will rob the people of their heritage, will connive with companies and corporations and trusts, will join hands with speculators and peculators and rogues,—who will befool he masses and prostitute opportunities and bribe the ignorant to their undoing with their own money,—who will profane sacred names and desecrate sacred offices and betray sacred trusts. There are Judas Iscariots and Macchiavels and Titus Oates and Aaron Burrs in politics; but there are, not on one side of politics only, men who scorn a lie, hate a bribe, despise crooked ways, love their country, desire its honour and its welfare, and without hope of reward or appreciation, misunderstood and misrepresented, labour for the ultimate welfare of our land.

The drama of human life as it unfolds before us its domestic, business and political scenes, teaches the cynical to sneer, the selfish to grow callous, the cowardly to despair; but its conflicts with wrong, its triumphs over suffering, all its interwoven intricacies of sorrow and of joy, of sacrifices and of heroisms, teach all noblest natures to strive, to endure, to be faithful, to hope and to aspire. Sympathetic association with our fellows is a powerful means of self-culture.

3rd. In the third place the divine thought finds expression in the facts and occurrences of our own individual lives. No one shall persuade me that Christ was mistaken when he said "the very hairs of your head are all numbered." Each life, as ordered by divine providence, with its trials, its labours, its afflictions, its disappointments, its successes, is the fittest training ground for each soul. The highest culture is accessible to each. No one of us should say, "Had I wealth, had I leisure, had I influential friends, I could attain to culture"; for the highest culture for each of us is the culture that we may have in these very circumstances in which we are placed,—in penury, in the daily struggle for our daily bread, in disappointments, in misunderstandings, in ceaseless conflicts. In the gardens of God for the growth of souls there are dank and dripping valleys, there are bleak and wind-swept summits, as well as sheltered sunny nooks; but every place has its fit adornment. From the top of Mount Washington I brought with great care some plants of a beautiful white saxifrage; I tended them; I watered them. For a little while they grew; they unfolded a few feeble blossoms, and then they died. In vain for them a rich soil, a warm corner, solici-They pined for their home amid the tous attention. tumbled rocks, for the tenuous breath of the mountain air, for the multitudinous stars of the frosty night, for the roar of the tempest sweeping free from the Rocky to the White Mountains. So they drooped and died. The daffodil loves the oozy meadows. The mountain saxifrage and the Alpine gentian cannot endure the sheltered air of the valleys. Some of us are born for conflict, some for unrelaxing toil, some for anxiety and disappointment; but each of us to fill and adorn a special place, and each of us, if we will, to attain the highest culture which, however, is not the culture of any one else. No two flowers in their full bloom, no two stars in their complete development, no two souls in their perfected beauty are alike.

4th. The fourth form of expression of divine thought is in the world of human achievement in art and in literature. Whatsoever noble ideal has been embodied in sculpture, in painting, or in architecture, or has been voiced in the richest music or the finest prose or the most exalted poetry, has been in no alternated sense inspired. God has spoken in the Laocoon, in the Lord's Supper, in the Par-The Æneid of Virgil, the De Senectute of Cicero, Milton's Areopagitica, Dante's immortal poem, Paradise Lost, Bunyan's Pilgrim's Progress, reveal a deity imminent in the thoughts of men. That which in the literature of any age has ranged widest, waved highest or plunged deepest into the intricate problems of existence and destiny is divine in a sense more profound than that in which the wayside flower or the scintillating star is divine. Do not for one moment suppose that in thus exalting all worthy literature and art I am underrating the value of that Semitic literature which, standing grandly apart, we call by way of preëminence the Book, the Bible. German thought, her highest and best thought, owes more to Luther's Bible than to her Goethes, her Schillers and her Kants, inestimable as is its indebtedness to them. England could far better spare all that Chaucer or Spenser or Shakespeare or Milton or Wordsworth has written, than suffer King James' Bible to lie unread on her library shelves. If there be a note of inferiority in French literature, if it lack ought of the virile strength and uncompromising earnest of German and English literature, it is not through inferiority of French genius, for it is not inferior; it is not because the Celt has less poetic fire than the Teuton, for he has more; but because the highest thought of which the human soul is capable, is not daily stirred by reading the words of David, of Isaiah, of Paul and of Christ, in French homes, as it is in Scottish homes. If the "Cottar's Saturday Night" could have been written in France, then she might have had her Shakespeare and her Milton. repeat, the fourth means at our disposal for attaining the highest culture is literature, more especially the literature which has been winnowed by the winds of twenty centuries, the literature of Greece and of Rome, and most especially by the literature of which the beginning predates Rome, the literature of the Hebrews, the literature that is of all literatures the purest, the noblest, the most inspiring and in a singular sense inspired.

Art and literature are preëminently the instruments of culture. As long as acquaintance with nature and with human life and with our own experiences of its discipline is dumb and inarticulate, these have but little power to develop mind, to regulate feeling or to strengthen and guide will; for they are necessarily indistinct and evanescent. But when some master of expression, whether by pencil or chisel or language of poetry or of prose has seized a conception, has purified it of all that is base, and has set it to blaze for ever, a constellation in the firmament of thought, it sheds an influence that will never cease to bless

the minds and hearts of men.

Let none of us say that culture is out of our reach. The means of culture are accessible to all. He who comes into contact with nature, if it be only by watching the changeful sky above and between factory chimney tops, who mingles sympathetically with his toiling, sorrowing fellows, who meets his own life with magnanimity, and who reverently reads his Bible, has all the necessary appliances for high self-culture.

Extract 4. Self-examination of the Presentative Faculty.— Have you a cultivated presentative faculty? As we have chosen to consider this faculty, it presents sense-intuitions, intuitions of reason and intuitions of self-consciousness. Is every act of sense-intuition full, accurate and rapid? Have you ever taken an inventory of all the powers of each sense? Do you know what the eye, the ear, the muscular sense and touch, not to mention the less intellectual senses of taste and smell, should tell you of the world in which you move? Is each of your senses so endowed by nature and so trained by practice as a servant of the will that it makes exact discriminations? I should like if time permitted to interrogate each sense. Let me ask a few questions of one sense, hearing, and of that only in relation to one of its endowments, the power of discriminating the timbre, the modulations of human speech. Is your ear attuned to the exquisite intonation of cultivated human speech? I care not in what language; let us speak of our own. Do you recognize the melody, the richness, the variety of the English tongue as spoken by a master of its resources? For of this tongue I must declare my belief that it is one of the noblest of our modern languages, holding a just middle position between the voluptuous languors of the Italian and the rugged, sometimes uncouth, strength of the German. I was deeply impressed by the music of human vocalization in the speech of Thompson, the abolitionist, whom, with Frederick Douglas, I heard speaking on American slavery, many years ago in Toronto; and again in an address delivered in this city a few years ago by Dr. Dallinger. To listen to such men, if we listen attentively and thoughtfully, is no unimportant means of culture. Do you discriminate in hearing? How many vowel sounds do you distinguish in English cultured speech? Have you observed the difference between the long vowel sounds of court English, the English of educated, highbred men of the midland and southern counties, and those of Northumbrian English, the English of which lowland Scotch and the Yorkshire dialect are varieties? Which kind of English pronunciation has the closer affinity with French pronunciation of long vowels? Are the English t and d identical with the corresponding French letters? Are your ears alert to all such inquiries continually? If so, I congratulate you that as far as speech is concerned you have the cultured ear; and it is in your power to acquire that refined pronunciation which, rather than any other single quality, is the outward sign of culture.

If, in a manner equally satisfactory, you can answer all questions that you ought to ask yourselves touching all sense-intuitions, your external perception is cultivated. If

you have learned with like fulness and accuracy to examine the relations of things, placing them rightly in space and in time, observing their interdependence as causes and effects, and distinguishing aright phenomenon and substance, you have comprehensive intuitions of reason. Reason has been cultivated in you. If you have learned to scan attentively the inner world, to observe the activities and passions of the soul, all that world of movement within, which issues in thoughts, emotions, motives and volitions, you have accumulated intuitions of self-consciousness; your introspective faculty is cultivated.

Finally, all these conditions being fulfilled, all your sense-intuition, intuitions of reason and intuitions of consciousness being given by the exercise of educational faculty, you are to be congratulated on the possession of a high-

ly cultured presentative faculty.

(To be continued.)

#### Editorial Notes and Comments.

THE June examinations form a very important feature of the school year in every province, though efforts are being put forth by many of those who plead for the education that educates, to reduce their importance to a mini-The necessity for such examinations presses upon any educational system, for while they have many characteristics which one would wish to see eliminated. there has not yet been invented a better method of testing the pupil as to the work he has done during the year, or of encouraging a wholesome emulation in the school-A contemporary has given the Province of Quebec some credit lately for trying to establish an equilibrium between the examination and the inspection of our higher schools. As it is, there is always an anxious looking forward to the June examinations among our teachers and their pupils, and our issue this month will probably greet them but a short time before the suspense reaches a climax. The examinations begin this year on Monday, the 31st of May, to continue throughout the week, and we trust that everything has been done by all connected with this part of our educational work to have an examination with respect to which there may be no after-reproach. Not long ago the students attending an institution on this side of the

Atlantic were allowed to have their examination in a hall in which there was to be seen, during the three hours it lasted, no deputy-examiner or overseer of any kind bodily present. The boys had agreed to take God as their witness; and when it was over they had the satisfaction of awaiting their fate as honest men, whatever the flut of the examiners might be. There is an example founded on first principles in such an exhibition which none of us would surely refuse to follow were it possible to co-ordinate the circumstances attending an examination held simultaneously in some seventy centres all over the province. Taking things as they are, the deputy-examiner is still a necessity, though the teachers, by a previous moral training or drill of their pupils can make his work of watching the easiest of tasks. It is but a poor principle to go by, to declare that the person who uses dishonest means at an examination, cannot possibly escape; though this is really how matters stand in connection with our June examinations as now conducted. Detection awaits the evil-doer in a multiplicity of ways; and while we say to all who have anything to do with these examinations, have a clean examination, for otherwise you are sure to be found out, we would rather say, have a clean examination, for to have such is honest in the sight of God.

—The teachers have this examination very much in their own hands. The regulations have been framed for their guidance, and contain nothing that can possibly imply a lack of confidence in their desire to do what is right and proper. Should any one by chance think otherwise, there is a reply to them to be found in the sature of the expression, Honi soit qui mul y pense. In a word, with the regulations in hand, and with a ready co-operation between teacher and deputy-examiner, as well as a previous solemn understanding with the pupils, the suspicions may at last be disarmed that would wish to proclaim in the hearing of parents and others that an examination is a thing likely to prove harmful to the pupils' morality.

—The date for the celebration of the Diamond Jubilee has not been agreed upon for every town and village in the country, but no school should be dismissed for the summer without the pupils being brought into direct connection with some commemoration or other of the long and prosperous reign of Her Majesty Queen Victoria. Should

there be no special public celebration in the district where the school is situated, the school children with the teacher and commissioners ought to arrange for one of their own. For instance, there is no reason why every school in the land, every school, even in the most remote corners of the Province of Quebec, should not commemorate the Diamond Jubilee of our gracious Queen, by placing the flag of Britain and the flag of Canada in the school-room. Dr. Harper, the Inspector of Superior Schools, has been making the suggestion of having these flags in every one of the schools he officially inspects, for some years past, and many school-houses are thus decorated at the present moment. the girls having purchased by subscription the Canadian flag and the boys the British flag. But, further than this, something should be done this year by placing a picture of Her Majesty above every teacher's platform, as a means of perpetuating a spirit of lovalty in the minds of the rising generation. Salute the flag, salute the Queen!

In this connection we would call attention to the advertisement of Messrs. Steinberger and Hendry in this issue

of the RECORD.

- -The second annual session of the Summer School inaugurated last year in connection with St. Francis College. by its principal, Mr. J. A. Dresser, will open on the 6th of July. Courses will be given in French, Botany, Drawing, English and Primary Teaching Methods, provided a sufficient number of students apply. Among the instructors will be M. de Bellefontaine, Mr. Honeyman, Miss Cairnie and Mr. Messenger. Intending students are requested to give notice of the course or courses they wish to take, as early as possible. Circulars containing full information as to fees, board and lodging may be had on application to Principal Dresser, Richmond. We trust that the number of attending students will be greatly increased this year, and that the promoters of the school may receive all the encouragement needed to make the enterprise a success. of our teachers who can do so, should avail themselves of the opportunity here afforded of passing a pleasant and yet profitable vacation.
- —Although by the time that this number of the Record is in the hands of our teachers, Arbor Day, for this year at least, will be a thing of the past, it may not be out of place at this season to speak of the many ways in which

the school grounds may be beautified. Much good work has been done in this respect in this province, and the recently established competition among our schools for the best kept grounds has given the movement an appreciable impetus. There is no reason why any of our districts should have grounds uncared for and unadorned by trees and shrubs or even flowers. The Educational Review says: "There are hundreds of school-houses scattered throughout the provinces that are destitute of trees, shrubs, garden plots, but there is, perhaps ground enough for a few weeds to maintain their existence from year to year. Let these be exterminated and replaced by flowers that will prove an ornament to the neighborhood, not a nuisance. Then let teachers, rate-payers and pupils form a district improvement society, fence in and level the grounds, no matter how small, and plant a few trees and shrubs and flowers. This is the Diamond Jubilee year. Let every school district do something that will honour the Queen and put itself in the line of progress. And what better memorial in every community to our noble Queen than a beautiful, even though modest, school-house with neat and well-kept school grounds?" Let teachers, pupils and commissioners co-operate in this matter, and, even if there be no government award in view, let us see if it cannot be said of the schools of Quebec, that they are all accompanied by grounds and out-buildings that have a neat appearance, as if all connected with them took some pride in making them agreeable to the eye. another page of this number we give some suggestions on how to beautify the school grounds.

—Am I teaching? Did you ever ask yourself this question? No better question can rise to the lips of the teacher. It does not answer this to say: "The walls of the schoolroom surround me; maps, charts and blackboards are on the walls; desks of the newest pattern are ranged in rows before me; young human beings sit on those desks day by day; these children rise promptly at the sound of a bell, march forth in order, and recite words they have learned, or even state truths they have investigated." All this may show they are gaining knowledge, it may show they are getting instruction, but it has nothing whatever to do with their being taught.—Canadian Teacher.

—The present danger in education, according to the School Journal, is this: To aim at material progress, fine

buildings, furniture, text-books, ampler salaries, and highly-educated teachers. We may attain all this and miss the main object; the danger is, that we mistake these for the main object. Education is for happiness. Is the present trend towards that goal? Are we not setting up something and naming it education, and talking about it as if it were education, but which, if we closely inspect it, it will be found to want its real characteristics? Buildings, text-books, furniture, highly-educated men and women at good salaries are not enough. The supremacy of the spirit must be the aim; of the spiritual nature in each pupil and of the Great Spirit in the entire earth. This must be the aim to cause happiness to abound. The teacher who has classes in arithmetic and geography will aim at something more than a residuum of facts about figures, mountains and plains.

—There is comfort for those who are in the right spirit to receive it in the following incident as related by the same exchange. A teacher who had spent forty years in the school-room was in the company of his school board—three in number; business had been finished, and they rose to separate. One, a man of considerable wealth, remarked: "There is one thing in which I'rof. —— goes beyond all of us—in doing good. I often envy him. I might not like that kind of occupation, but I confess I admire it." The teacher went to his modest home, revolving these words as he walked along. He had often been tempted to give up teaching, because of the small pecuniary returns; then he reflected: "I am useful; I know I am; I will be content." This, after all, is the reward the teacher must aim at.

# Current Events.

AT a recent meeting of the University Council of Manitoba, the new amendments to the University Act were submitted and accepted. University education in the province has hitherto been carried on by the Colleges of St. John's, St. Boniface, Manitoba, Wesley and the Medical College. The government of the province has contributed a limited amount yearly to the work of examination and conferring of degrees only. This amount, which has stood at \$3,500 for some years, is now to be increased to \$6,000,

which sum may be applied in support of teaching as well as examining. But, as it alone would be quite inadequate to justify the commencement of university teaching, apart from the colleges, provision is made for advancing a further amount of \$5,000 a year from the provincial trust funds, which, with interest at 5 per cent., will be a charge against the university lands. A sum not exceeding \$60,000 will be advanced in the same way toward providing a building for university teaching. Although at first only the natural sciences will be taught by the University in this building and under this arrangement, it is expected that, as means allow, other subjects will be added, so that in time the University of Manitoba will be able to do the same work by the same means as sister universities of the Dominion.

One of the local papers says: "The step now taken marks an important stage in the history of university education in the Province. It is the first movement of the Province to assist the institution in its teaching; and it is taken none too soon, because further progress would be crippled without it. It is understood that the legislature consented to the present step with reluctance; and this is easily understood in view of the limited range of provincial resources. But the question had to be faced sooner or later, that if Manitoba is to continue to have a university at all which will meet modern requirements, the province must assist in its work. However, the grant of 150,000 acres of land possessed by the University will, for some time to come, permit of a great deal of work being done without any great drain upon the province.

—In his last annual report of the public schools of Nova Scotia, Dr. Mackay, the superintendent of education, calls attention to the need of instruction in those branches of vegetable and animal physiology and agricultural chemistry, which bear upon the scientific prosecution of agriculture. Dr. William Dawson, when superintendent of education, as well as his successor, the late Dr. Forrester, urged the need of this feature of the school curriculum, which would qualify the youth of the province to grapple with the difficulties attendant upon the settlement and development of a new country. For some time the practical side of education has been lost sight of, while the literary and classical side was developed. Recently, however, a model farm and school of agriculture has been established at

Truro, in connection with the normal school, and this has been followed by a horticultural school at Wolfville, where the plans formulated by Dr. Dawson and others are being put into execution.

- —A Bill for the purpose of equalizing the salaries of men and women teachers has been introduced into the Pennsylvania assembly. It provides that female teachers shall receive the same compensation "as is allowed to made teachers for the like service, when holding the same grade of certificates and are employed to teach an equal grade as male teachers." Any board of directors or controllers violating the provisions of this section are declared to be liable to removal from office on complaint of any female teacher who shall prove, by one or more reliable witnesses, before any court of record, that she is unjustly discriminated against.
- —From the last report of the committee on accounts of the Boston school board, it appears that the number of regular instructors on the pay rolls is 1,613. The average number of pupils belonging to the different grades the past year was 78,167. The average cost per pupil amounted to \$28.95; a decrease, as compared with that of the previous year, of 19 cents per pupil. The salaries of instructors have increased 41 per cent. within the past ten years, although the number of pupils has increased only about 25 per cent. in that time. The average salary paid during the year to each regular high school instructor was \$1.734.54; grammar school instructor, \$989.37; primary school instructor, \$709.33.
- —The news comes from Chicago that a compulsory education bill has been passed in the State of Illinois. It requires that every child between seven and fourteen years of age shall attend school sixteen weeks each year, and that boards of education shall, at the time of election of teachers, appoint one or more truant officers, whose duty it shall be to report violations of this act.
- —The mayor of Baltimore has under consideration a plan contemplating the purchase by the city of lots of land, some 300 feet square, for use as sites for school buildings. Until these become necessary, the lots could be used as playgrounds, where the children could have tennis courts and ball games, and when the sites were needed for buildings, there would still be some ground left vacant for play.

- —German universities have on their rolls the names of 2,000 students from foreign countries. A very few of these students are preparing to take degrees. The majority of them hear lectures in special branches of science for twelve or eighteen months, and then they return to their homes to practice what they have learned. It is estimated that the total amount left in Germany by these foreign students is something like \$1,600,000 a year.
- —Prussia is about to increase the total amount that she pays her officials by almost \$5,000,000 a year, part of which will benefit the university professors, who are state officials. The average salary will then be \$1,600 a year in Berlin and \$1,400 a year in other Prussian university towns. That seems rather small, considering that Berlin university has had such instructors as Virchow, Helmholz, and Berg-To be sure, a professor has attendants at his lecture courses, from each of whom he collects a small fee, half of which he may keep, but probably the most popular professors are unable to obtain more than \$1,000 a year from these fees. Yet, a professor's chair in a German university is a much coveted place. Young men of great talent and reputation cling to the universities for years, supported only by the earnings that fall to tutors, in the mere hope of some time obtaining a regular professorship. A tutor lives a life of self-denial. He has but one room, takes only rolls and coffee for breakfast, only coffee for luncheon, with a slice of meat and a taste of vegetables and coffee for dinner.

As a full-fledged professor, he enjoys an eight-room flat. He never aspires to keeping a horse, or taking his family or himself to the seashore or mountains, that is, if he be dependent upon his own resources. Studying, walking, and lecturing are all of the diversions of his life.—School Journal.

—Many students from the Russian universities are being banished to Siberia. No charges are brought against them, they are simply seized by the police and sent away. The universities have been closed for the present, while thousands of students have been arrested. The most of these will be declared innocent and will be set at liberty, but they cannot enter the university again, for the very suspicion of disloyality to the government renders them unworthy of a liberal education. The difficulty arose a few weeks ago, when the students of St. Petersburg planned

to hold a religious service in memory of the thousands of persons who were crushed to death at the coronation of the czar. In reality, the war against the universities began many years ago. In the reign of Nicholas, they were organized like an army, and every lecture was followed by a drill. Until within a few years, they have elected their own professors and have approved or rejected the programme of lectures submitted at the beginning of the year, but now all professors are appointed by the ministers, and it is not even necessary that they have the doctor's degree. study of Russian literature, history and geography has been abolished on account of the "dangerous tendencies." The boys in the gymnasia study very little outside of Latin and Greek. In these, nothing can be done with the literature, lest it be unsafe, so for seven years pupils are compelled to practise on the subtleties of grammar. hours a week given to a language like Latin renders the The examinations are so system disastrous to education. difficult that according to the report of the department of instruction, which gives the results for seven years, 6,511 pupils completed the course during that time, while 51,406 had either been expelled for failure to pass the examination or had given up in despair. The chances against going through all the classes of the gymnasium, and so being able to enter a university, are, for a boy in the lowest class, as nine to one. Of those who do manage to work through the course, one fourth break down in the final examination. -Exchange.

## Literature, Historical Notes, Etc.

# PHYSIOGRAPHY FOR BEGINNERS.

### A Review.

The following notice may be of interest to the readers of the EDUCATIONAL RECORD, as the subject is the book used to designate the scope of the instruction in science required for matriculation according to the revised course of study of McGill University, which was mentioned in the last number of the RECORD.

PHYSIOGRAPHY FOR BEGINNERS, by A. T. Simmons, B. Sc., Tittenhall College, Staffordshire, Eng., (MacMillan & Co., London, 1896. Price, 2s. 6d.) This very interesting

and instructive little book comprises 344 octavo pages, and although the type is rather small, it is, nevertheless, very clearly printed. The numerous figures and illustrations, which by the way are admirably chosen, are exceedingly well produced. Considering its price, the mechanical

work of the book is certainly very good.

The subject matter may be best analyzed by referring to the component parts of the various divisions of science to which they belong. Thus the first seven chapters (106 pp.) comprise an admirable introduction to the study of physics. It discusses the more general properties of matter, mass, density, motion, mechanical power, energy and heat in a clear and lucid manner, but without mathematical calculation.

One hundred and four experiments are described, and fifty-four illustrations are figured. A resumé of each chapter is given at its close and a few suggestive questions are introduced. The two last mentioned features are observed throughout the book. Chapters eight and nine treat of the chemical composition of matter, the elements and compounds, in thirty-six pages. The laws of chemical combination, the properties of oxygen, hydrogen, nitrogen, carbon, iron, mercury, silica and lime are briefly but clearly stated. Fifty-four illustrative experiments are described and several forms of apparatus are figured.

The questions of the movements of the earth, the measurement of time, the phenomena of the sun and moon are

discussed in chapters ten, eleven and twelve.

These include, besides the ordinary matter of mathematical geography descriptions of the primary methods of astronomic investigation with reference to the masses, distances and movements of the sun, earth and moon. Kepler's laws are stated and explained as far as possible without the use of mathematical formula.

The next two chapters contain an interesting summary of the chief phenomena of the atmosphere. Although brief it furnishes a very good introduction to the study of meteorology. It might have been more in consistence with the apt illustration of the other parts of the book if this division had been more fully illustrated. This, however, can be easily supplied by the observation of clouds, storms, &c., from nature.

The following six chapters are devoted to the study of the earth from a geological point of view. The properties of sea-water, the currents of the ocean and its effect on the land occupy two of these chapters, rivers and glaciers a third, while the next two are devoted to minerals and rocks, and the twentieth to dynamical geology. The figures and plates used in this part are exceptionally good, and the study of the minerals and rocks, although too detailed for the limited term and equipment of our academies, is very interesting. A mineralogical and lithological collection, such as may be obtained gratuitously for schools on application to the Gelogical Survey of Canada, would be indispensable in teaching this subject. And even then the work is probably too specific. The following is the tabular classification of the igneous rocks given on page 292:—

#### IGNEOUS ROCKS.

. Ac	CID	Intern Sub-Acid	Basic	
Silica, 66-8	30 per cent.	Sili 60-66 p. c.	са : 55-60 р. с.	Silica, 45-55 p. c.
Typical { Rocks contain {	(i) Quartz (ii) Orthoclase. (iii) Mica. (generally Muscovite)	(i) Ortho- clase. (ii) Horn- blende.	(i) Plagio- clastic Felspar. (ii) Horn- blende.	(i) Plagioclastic Felspar. (ii) Angite. (iii) Magnetite. (often Olivine.)
Volcanic { and Glassy {		Trachytic. Pumice.	Andesitic Pumice.	Tachylite.
Volcanic and Hemicrystalline.	Rhyolite.	Trachyte.	Andesite.	Basalt.
Plutonic and conse- quently Ho- locrystalline	Granite.	Syenite.	Diorite.	Gabbro.

As the author states, that part of the work which describes rivers and glaciers has been modelled on the plan of Geikie's "Text-book of Geology," and it certainly reflects many of the excellences of that admirable work.

The concluding chapter discusses the phenomena of terrestrial magnetism, and thus constitutes a return to the

science of physics.

In proportion to the attention given to experiment, it is probable that too little is given to observation. This defect becomes more serious, as the schools, in which the book is used, are less amply equipped. The book is, however, to be highly recommended as a handbook of general elementary science, and it should find a place in the library of every teacher of scientific or even of general subjects.

J. A. D.

# Practical Hints and Examination Papers.

#### THE SCHOOL GROUNDS.

When grounds are properly levelled and drained and freed from disagreeable obstructions, the first effort to beautify them in every instance, should be to erect the necessary closets and to shield them from observation by a thickly planted row or clump of evergreens. Next, hard walks should be made from the street to the different doors of the building, and from them to the closets screened by

the evergreens.

When the school building stands a short distance from the street these walks may wind around oval plots where flowers and shrubs may be grown. In various parts of the grounds beautiful trees may be planted, like the maple, or the elm, or the oak. Between these plots of ground, of whatever form, oval or otherwise, should be sown seeds of the most beautiful and hardy grasses adapted for lawns, so that there shall be formed a smooth and handsome turf. which must be often rolled and carefully cut. In some shaded corner native ferns should be planted, and elsewhere some of the many elegant native shrubs should find a cherished The suggestion of State Superintendent Sabin, of Iowa, is worth adopting, "To teach children the kind of trees which flourish best in that section; which of them are best for timber; which for shade; and which for fuel. Specimens of each will then be found on the school grounds,

and referred to for purposes of illustration. In the same connection we must teach how to plant and care for them, and cultivate in each an honest respect for a thriving grow-

ing tree."

In the rear of the school buildings the playgrounds should be located, where trees also may be planted to afford shade and pleasure, but not to interfere with the sports of the children. If in the planting of the trees in the grounds the children are permitted to take part, and name them, there will be a feeling of interest and ownership in the trees on the part of the children which will go far toward securing needed care for them.

The plots devoted to flowers and shrubs may have many varieties in the passing years. The children often have plants they would gladly place in the school grounds for the summer. Others have seeds which they would sow, so that each summer the grounds would disclose the taste of the pupils as well as of the teachers. Different plots might be assigned to different rooms or classes of pupils, and a wholesome rivalry excited as to which should be most neatly kept, and show greatest improvement in the summer. Great variety might be given the grounds from year to year by training hardy vines and creepers over the walls of the buildings, and around the windows, or by planting them beside arches and trellises over which they would grow. The comparatively trifling expense needful to make the required arches and trellises would gladly be met by the parents when once the children proved their interest in such methods of beautifying the grounds.

-In a former number of the RECORD, we gave a set of sentences with blanks to be filled in by the pupils with some form of the verbs lie and lay. There are two other words that are as often misused the one for the other, the verbs sit and set. Try your pupils in grammar with this exercise :--

Copy the following sentences, filling blanks with some form of sit or set:

Will you—by me?
 Did you—the cup on the table?

3. After—out two trees John—down to rest.

4. Mary—the chair on a large box and then—down on it.

5. Lucy—the table every morning.

- 6. The bird was—on a post when we first saw it.
- 7. The doctor—the boy's arm.
- 8. The travelers heard a noise in the woods and—up all night.
  - 9. The men are—fence-posts.
  - 10. Did you—the hen?

—The boy who thinks is well portrayed in the following story as given by the Youths' Companion. This boy is described as never saying anything remarkable, as eating oatmeal in large quantities, chasing the cat, slamming the door, and otherwise conducting himself after the manner of boys; with the exception that he asks few questions and does much thinking. If he does not understand a thing, he whistles, which is not a bad habit—on some occasions.

There was much whistling in our yard one summer. It seemed to be an all-summer performance. Near the end of the season, however, our boy announced the height of our

tall maple to be thirty-three feet.

"Why, how do you know?" was the general question.

" Measured it."

" How?"

"Foot-rule and yardstick."

"You didn't climb that tall tree?" his mother asked, anxiously.

"No; I just found the length of the shadow, and meas-

ured that.'

"But the length of the shadow changes."

- "Yes, but twice a day the shadows are just as long as things themselves.. I've been trying it all summer. I drove a stick into the ground, and when the shadow was just as long as the stick, I knew that the shadow of the tree would be just as long as the tree, and that's thirty-three feet."
- "So that is what you have been whistling about all summer?"

"Did I whistle?" asked Tom.

—WE reproduce the subjoined questions in Physiology and Hygiene from an exchange. They may prove useful as a test ci the knowledge acquired during the past year by your papils.

1. Define (A) sutures; (b) dentine; (c) retina.

2. What is the office of (a) pepsin; (b) lachrymal fluids; (c) synovial fluid?

3. What membrane envelops the heart; (b) covers the tongue?

4. Mention two modifications of the skin, and state the

function of each.

5. (a) In what class of blood vessels has the blood an intermittent motion. (b) Where is intermittent motion interrupted? (c) What is the use of the valves in the veins?

6. Show how poor teeth may become the cause of poor

health.

7. What is the distinguishing color of the fluid in (a) the lacteals; (b) the arteries; (e) the veins?

8. What effect does the relaxation of the diaphragm have

upon the act of respiration?

9. What is the principal secretion of (a) the liver; (b) the

kidneys?

10. (a) Why does a person feel stronger immediately after partaking of an alcoholic beverage? (b) What are the after effects?

#### ANSWERS.

1. The immoveable, dove-tailed joints of the skull; (b) the chief substance of the teeth, just beneath the enamel; (c) the inner coating of the eye.

2. (a) To digest the albuminous food in the stomach; (b)

to keep the eyeballs moist; (c) to lubricate the joints.

3. (a) The pericardium; (b) the mucous membrane.

4. The nails, to protect the ends of the fingers, and aid in picking up things; the hair, to protect the head.

5. (a) In the arteries; (b) in the capillaries and veins;

(c) to prevent the blood from flowing back.

- 6. It hinders the proper mastication of food, and hence the stomach is overworked, and the digestion impaired.
  - 7. (a) White; (b) bright red; (c) dark red. 8. It helps to expel the air from the lungs.

9. (a) The bile; (b) the urine.

- 10. (a) Because the blood flows more rapidly through the body; (b) the brain is stupefied.
- —EARLY in the commencement of the study of geography, the children should learn to locate the points of the compass. They all know in what direction the sun rises; they may point towards the place where the sun rises. The teacher should inform herself by observation where the sun rises directly in the east, and by the use of a compass

get the true direction of north. Let the pupils point to the setting sun. Some of the class may have visited a place east of the town where they attended school. Let the class point to the places named. It is best to have a compass in the schoolroom. Every child is interested in watching the needle. Let the class point to the north. After the teacher has explained the direction of south, practice in the same way. The teacher may name prominent cities and give their directions in order that the class may be exercised in learning direction. Care must be taken lest the pupils associate points of the compass with different parts of the schoolroom. In order to test this, a pupil may be sent into a recitation room or a hall and directed to point as the teacher or the class may direct. Afterward the immediate points may be taught.

When the directions are taught on the map, the teacher must use great care lest she speak of north on the map as "up" or south as "down," and she should exact correctness of expression on the part of her pupils. But little time will usually be required to teach the points of the compass, as many children are familiar with them before entering the primary school.

## Correspondence, etc.

To the Editor of the EDUCATIONAL RECORD,

DEAR SIR.—In reading over the RECORD—always a pleasing task to me.—I notice some verses of a patriotic nature which, while unobjectionable in their tone, are wrong in so far as they help to propagate a very common error, viz: using the word *England* when *Britain* is meant. Don't you think it an aggravation of the error to spread it in an "Educational Record?"

I think it would only be right for you, in your capacity of Editor, to take some notice of this very common mistake. Who ever heard of *England's Union Jack?* 

Please do not think me hypercritical, but honesty and precision of speech should be essential to school teachers.

Yours respectfully, John Fulton.

Montreal.

#### Books Received and Reviewed.

[All Exchanges and Books for Review should be sent direct to the Editor of the Educational Record, Quebec, P. Q.]

A new and improved form marks the opening issue of the ninth volume of the Canadian Magazine. The May number is exceedingly bright from every point of view, and shows that the progress of our national publication still continues. The illustrated articles are: "The Premiers of Nova Scotia Since 1867," a most opportune article at the present moment; "A Visit to the Birthplace of James Wolfe, the Conqueror of Quebec," which is most profusely illustrated from special photographs and rare paintings; "Dreams of Genius," a strong story by Stambury R. Tarr; and a French-Canadian poem by F. Clifford Smith.

The Atlantic Monthly for May contains a very interesting article on "Art in the Public Schools." In the same number is a well told short story, "The Ramparts of Port Royal," by Charles G. D. Roberts, and the closing instalment of Paul Leicester Ford's truly delightful "Story of an Untold Love." John Burroughs contributes to the series, "Men and Letters."

The May number of the Ladies' Home Journal is as good as the best issue of this standard home magazine: The cover design is a beautiful bit of art and the contents are as varied as they are interesting and instructive. The editorial contributions to the various departments are timely and to the point, and have a great deal to do with the popularity of the Journal with all classes, and, we might almost say, with both sexes.

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