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THE CANADA
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NOVEMBER, 1896.

"HUMANITY."*

By Prof. T. R. Glover.

A VERY few words will set forth the views with which I have undertaken the duties of Professor of Latin in Queen's University. If you will look into the calendars of the universities of Scotland, you will find, as a general rule, that the Latin chair is there styled the chair of "Humanity." In this name, in my opinion, is summed up all that is connected by the study of Latin. In the middle ages, from which this name comes, Latin represented the culture of mankind; Latin was synonymous with education; Latin was the one great training ground of the mind. And to-day there is no better road to culture than the study of Greek and Latin. Philosophers may talk of the necessity for promoting accuracy of thought, and urge the claims of philosophy as the best means of attaining it; but the classicist asks the same thing, and if the experience of Great Britain may be trusted, the study of the classics has done more for insuring accuracy of thought even than philosophy.

When I became a candidate for the chair, to which the trustees have so kindly elected me, I undertook, if appointed, to do all I could for the advancement of Queen's as a place of sound learning and religious education. Of sound learning, because it is the necessary foundation for men who would think well, and who would act well. Slovenliness and unsoundness are fatal to everything in every sphere of life, and one of the most important duties of a Latin professor is to train men in accuracy and thoroughness. This is no mere academic affair; these qualities are indispensable in the world, and are yet among the greatest gains of academic training.

Of "religious education," because as a distinguished Cambridge friend of mine says, "all the 'ologies are Theologie," and every man should be a theologian. All knowledge of human thought and human life points one way, and should contribute to our religious development. In the Latin language is written the thought of man for two thousand years. Whatever was of worth in thought or speech or action for sixty generations is set forth in that language, and he who can read it can enter in the minds of the great men of old. We can by the aid of Latin see the records of the growth and decline of the greatest empire of history—greater than our

* Address at the Convocation of Queen's University 15th Oct., 1896, by Prof. T. R. Glover.

own, because it was more universal, because it was alone, and because it moulded the modern world. The laws, the civilization and the religion of Europe and America bear to this day deep impress of the influence of the Roman people. In matters of religion, even Protestantism has the marks of the influence of the Roman Church. Half Christendom still actually adheres to Rome, and our Protestant churches have not yet shaken off the last traces of Roman influence, and I pray God it will be long before they do. If the men who spoke in Latin have shaped the world, we who have entered into their heritage may at least do them the compliment of reading their will. It is never an idle study to learn the minds of men.

But I may be told that this is a young country and a poor country, and one must not expect great things when there is necessarily so little leisure for the study of Latin. The greatest of all the English kingdoms was Northumbria; it was planted by savage Angles, pirates and plunderers, who continued such till the Latin Gospel was preached to them. In seventy years their barbarism had rolled away to such an extent that that kingdom gave the world one of the greatest of women saints—St. Hilda of Whitby; the great ecclesiastical statesman who brought the English Church in line with Rome, St. Wilfrid; the poet Caedmon; that great agent of ecclesiastical and social development, the Abbot Benedict Biscop; and greatest of all, one who was at once astronomer, mathematician and theologian, and second in the order of Latin historians, the Venerable Bede. That was the record of one small and poor country in seventy years. Another small country and poor country is Scotland, the nurse of poor men and great minds. As a whole, it always has been poor, and always will be poor, and yet in every quarter of the globe Scotsmen come to the front—they control the great business enterprises, and they are the Chancellors of the Universities. The secret lies in sound learning and religious education. Scotsmen take pains and study the humanities.

Turning to ourselves, in conclusion, we have much to do. I can do nothing by myself—I depend on the co-operation of my students. Together we mean to raise still higher the reputation of Queen's for classical learning, till throughout the length and breadth of the continent it is a household word that the man who takes classical honors at Queen's is in the highest degree a master of his subject. Working together, we will win our College a reputation for thoroughness and for a high standard—a high standard which will not turn men away, but will draw from every direction men who desire to study. It will mean steady work and hard work, and in the gallery and on the floor of the hall I see the men and women who with me are going to do that work, who will be my fellow-students. They are the students who will unlock with me the heart of the old world, and enter with me on the heritage of the Latin race given to us by God.

Religious instruction in public schools should be based on fundamental and common doctrines, on life and morals. Doctrinal teaching can be carried to the point where it inevitably leaves a deeper impression of religious rivalry than of religious duty. This is the weakness of Separate Schools. They emphasize division more than duty. In the following fundamentals there would be a minimum of division and a maximum of duty, (1) a personal God; (2) individual responsibility; (3) immortality; (4) future judgment; (5) Ten Commandments, and (6) the Sermon on the Mount.

THE TRUCK SYSTEM AT THE NOVA SCOTIA COLLIERIES.

C. OCHILTREE-MACDONALD, PORT MORIEN, CAPE BRETON, N.S.

AN agitation now in progress down in Eastern Nova Scotia deserves the attention of all interested in capital and labor. The truck system of paying workmen in "dry goods and groceries" is exciting great discontent, and is encouraging, by its demoralizing influences, all sorts of social backsliding. This system—to borrow the language of a delegate to the Workman's Convention held at Truro, Nova Scotia, in 1895, forces the workman to give his labor in exchange for dry goods and groceries. The mine owners in Cape Breton keep stores open; and moral suasion, intimidation by petty officials and even direct coercion, are used to induce the workmen to go into these stores. The laboring man is thus cut off from the advantages of outside competition among private storekeepers; and cannot finance himself on his own money. The high prices absorb his income; and in frequent cases, as another delegate to the convention referred to above stated, the workman is "kept in the thrall of debt." Slowly but remorselessly the wages of the great industrial population of the Sydney coalfield — the "life blood" of eastern Nova Scotia—are being absorbed and taken completely out of circulation. In the midst of industrial developments unprecedented in the history of the country, an acute money famine is distressing the people and demoralizing outside trade. It is becoming increasingly difficult to support the churches and education because money is so much an unknown quantity; church and education taxes cannot be paid in "dry goods and groceries." These mine stores enable the operators of the mine to: 1, make a lawful profit out of the labor of the employee; and 2, an unlawful profit out of the food, etc., of the workmen. On the 15th of October, 1831, the British House of Commons passed a piece of most stringent legislation against this sort of thing. On the 16th September, 1887, this legislation was called up again for reconsideration and extended to Ireland. The disgusting system of remunerating British workmen in "dry goods" and groceries has consequently become obsolete over there. I went over to Great Britain last winter and thoroughly investigated the old system as it once existed. I found that all classes admitted that the abolition of the system was one of the foundations of Great Britain's greatness; that money became free; labor was freed and raised to an independent status, and that the wealth formerly tied up in the purses of the "classes" now flowed and ebbed among the masses with the regularity of the tides which ebb and flow around their island home. The extermination of the truck system of paying labor in "dry goods and groceries" brought into existence a great and influential class of merchant traders and shopkeepers which, as history teaches, has built up the empire during the past half century as no other class has? Taking their small capital derived from the industrial sections of the country—capital be it remembered which once through the truck system never saw daylight—these merchant traders and shopkeepers of the British Isles threw it into innumerable industries, especially steam-shipping, and created that vast mercantile marine which is at once the wonder and convenience of the world. The abolition of the British system of paying labor in "dry goods

and groceries" thus had magnificent results, results which we covet for our own Nova Scotia. We have an Act drafted on the British model and are fighting it through to the Local Parliament. The matter was brought up in the House of Commons in 1895; all the newspapers in the country immediately concerned are against the system; the workmen have protested time and again in conventions and in their lodges; the merchant traders have condemned it in repeated conventions and the people, generally, have signed petitions to the Government for legislative relief from the truck system. It is fair to explain that at the collieries on the mainland of Nova Scotia common sense and decency has abolished this system, but it still remains like a cancer in the Sydney coalfield.

NATIONAL PATRIOTISM.

By W. Irwin, Principal Flesherton P. S.

(*Concluded from last month.*)

THE teacher should realize that he occupies an influential position second to no other man, not even the clergyman. We may form a slight estimate of his power in controlling the character of the future if we remember that the minister's way to the pulpit, the lawyer's way to the bar, the politician's way to parliament, and the merchant's way to the counting-house, as well as the farmer's way to the plough, all pass through the school room; and the teacher possessed of the right kind of personality has the opportunity of wielding a mighty power in influencing the life and character of all future generations, and inculcating into the minds of all classes a love for what he loves and a hatred for what he hates. How important it is, therefore, that the mind-moulders of a country, the character-builders of a nation, should be men and women fired with all the nobler qualities that go to make a perfect manhood. Bearing these facts in mind and feeling that "children are the to-morrow of society," it is essentially necessary for our truly progressive country that every school should have at its head a truly patriotic teacher, whose spirit of enthusiastic loyalty may be so infectious as to be caught and cherished by every Canadian from the Atlantic to the Pacific.

As Canadians we should teach more of Canada, and in teaching Canada we should teach it as only one colony of that vast British Empire on whose dominions the sun never sets. We should have a Canadian History, fearless in exalting the great actions of Canada's great men. We should know more of the geography of our own country. We should know more of our commercial relations, the value of our exports from various sources, our imports, our material advancement, and our relative position in the commercial world—in short, we should know our geography, which consists of more than a knowledge of a few cities, lakes and rivers. We should honor our country's flag and know its significance, and in studying as a patriotic object lesson the crosses of St. George, St. Andrew and St. Patrick, we must appreciate the fact that these emblems are typical of a triune power, ready and willing and able to protect us from any insult that would

bring dishonor upon our national escutcheon. Let us hope that the new national flag will have emblazoned upon it an ensign worthy of "the land of the maple leaf."

It must not be thought that the patriotic spirit of the past is on the wane. At times when peace and order reign supreme it does seem that our people are lacking in patriotic sentiment; but let once the war cloud, or any other disturbing element, begin to darken our horizon and we soon find a people who are willing to sacrifice time and property, yea, even life itself, in defence of their country; and the same spirit that characterized our ancestors in the past would manifest itself in the present generation to defend us from dishonor. We want a growing loyalty, a progressive patriotism, and we must look to our schools to get it.

We cannot fail to admire the superlative, shall I say omnipotent, loyalty of our neighbours to the south of us, and I believe that we, as Canadians, might do worse than to take a leaf from their book, and do our "level" best, as they are doing, to build up a national love of country. Yet I do not think it would be wise to carry out to the full the principles practised by our American cousins. The children in the great American union are grounded and drilled in the history and geography of their own country. We believe this to be right, yet we as sincerely believe in a broader knowledge and a broader liberalism than that which sees everything worthy of admiration within the political boundaries of any one country. I have no reason to assert positively that the American children are taught that the sun rises in Boston harbor and sets at the Golden Gate, but there are some who act as if they really believed it to be so. Notwithstanding this, we feel like honoring the young American for his enthusiastic loyalty, and we are looking forward hopefully to the time in the near future when Canadians will appreciate Canada as much as the Americans do the United States. The American mother teaches her infant child about George Washington's hatchet and the favorite cherry tree, and admonishes the dear one to emulate the virtues, particularly the truthfulness, of that good old father of his country. It is scarcely necessary to say that some forget their first lesson. The remaining presidents are next taken in order; all their virtues are instilled into the child's mind, and by the time he enters school the boy has learned about all the presidents, and has had his first lessons in patriotism; the work is carried on in the school and practised throughout life. Is it not possible to find in our Canadian schools pupils in the highest forms, and perhaps teachers, who would hesitate before naming the governors of Canada since confederation? This knowledge in itself may not be of any great educational value, yet it would be well for every Canadian pupil to have a tolerably good knowledge of the history of his own country. Perhaps there are still those who think, as some of my teachers did, that Canada has no history. Let such a one read Parkman's admirable works, and he will find that Canada has a history, and a history too, whose truth is stranger than fiction. We have other writers on the same and different periods, whose works are equally interesting, and, though the introduction of such voluminous works into the school-room would be out of the question, the teacher's knowledge of their contents would enable him to vitalize the dry bones of history, as it is often presented, and to divert many a child's mind from reading with suicidal relish a class of literature that saps the intellect, destroys the manhood, and unfits a person for true citizenship.

So far I have endeavored to give a presentation ot the subject from a rational standpoint. We can hardly hope to make true patriots through intellectual training alone. We are all more or less emotional. We need to cultivate the heart as well as the head, and I believe there is no more powerful means of touching the emotional side of a man's nature than through the power of song; hence the necessity for teaching in all our schools those patriotic gems of national song whose influence fires the soul and awakens the emotions. The poet says, "Let me make the songs of the people and I care not who makes the laws." In the teaching of song, as in everything else, the teacher must *feel* what he is doing. "O Pedagogy, how long wilt thou continue to darken with thy rules, leading-strings and machineries!" We have too much conventionality in our teaching, and we will hail with delight the advent of the time when the teacher will be measured by his ability to make true citizens rather than his aptitude to cram intellectual storks for the passing of some literary tests. We want a loyal people if we are ever to be a great nation. We should love and respect our country's flag, and from every schoolhouse throughout the length and breadth of the land it should be seen floating on every national holiday. We should have a patriotic school paper, unstained by party politics. We should have a day in each year devoted to the commemoration of our dead heroes and our patriots of the past. We should know the lives and characters of our nation's benefactors, and try to emulate their virtues. The teacher should be able to put on an emotional garb, and awaken the emotions of his pupils by a touching appeal to their sympathies, in explaining the conduct of our heroes. We have had few wars. In no case have we been the aggressors. Our school history says very little—much too little, to give us inspiration. Let us supplement these dry facts when we can, by reading to our classes literary gems whose tendency is to awaken the emotions. The reading of Hull's bombastic proclamation to the Canadians, coupled with a telling word-picture of his subsequent cowardice when he saw the first redcoat, and heard the yell of the first Indian, will give to "the war of 1812" a vividness it never had before. The teacher must feel what he teaches, and weep if necessary to give emphasis to his teaching.

We want a system of ethics that will not stop with the individual, but extend from the centre to the circumference of all our corporations, even to our legislative halls, for after all we may say and do, we cannot have a truly loyal, happy and progressive people unless the light of our constitution is made to shine in the hearts and homes of all classes; then, and only then, can we look for the truest loyalty, and feel that Canada is a habitation of patriotism, and the teachers of our public schools are the Archimedean levers to whom we must look for the accomplishment of this great end.

Permit me to say a few words with reference to the qualifications of the teachers who can aid in bringing about these results. The state says he must have enough intellectual power to enable him to pass his literary examinations; he must have good morals, but his certificate fails, and ever will fail, to show his percentage of morality. There are other forces without which no teacher can be successful in building up a true citizenship. He must be truly patriotic; he must have character; he must have a strong personality; he must have sympathy, and he must have will power. How is it that a teacher of Herculean strength physi-

cally has a school that might well be characterized as a pandemonium, while under the influence of another, with scarcely strength enough to endure the fatigue of the labor, the same school is soon changed into a paradise? The former is lacking in that decision of character necessary to the enforcement of his own authority. A person who lacks will power or the ability to exercise it should never be a teacher.

As to *what* we should teach, I cannot express it better than in the words of a liberal-minded American: "Teaching patriotism," he says, "is teaching love of home and native land; love for the flag, whether it be the Union Jack of grand Old England, or the Star Spangled Banner of our glorious American Union. Teach the national airs, whether it be "God Save the Queen," "America" or the "Marseillaise" hymn. Teach patriotism as you teach national history; teach loyalty and fidelity to the government, whether that government be a republic, an empire or a kingdom. Teach the duty of true citizenship. Teach the triumph of national genius. Teach the achievements of nations. Teach the richness and productiveness of the nation's soil. Teach the grandeur and the beauty of the nation's art, and of its scenery. Teach everything, and anything, in fact, in nature or in the nations, or in individuals, which will make the student stronger, which will make him patriotic, faithful and true. Teach a patriotism to our children, a love of country, of our country's traditions, of the traditions of our mothers, of our country in the past, of our country in its present pride and power, and our country in its future and great destiny; its vast resources, constitutional liberty, and above all, our country in its freedom and union forever."

Even at best, educational changes are only changes of fashion, the swing of the pendulum from one extreme to another, and sure to need correction by a fresh reaction.—*D. Harris, Washington, D.C.*

THE SOCIAL MISSION OF THE PUBLIC SCHOOL.

By Pres. Hyde, Bowdoin College.

WHAT is it that, as taxpayers, as parents, as members of school boards, as teachers, we are trying to do for the children and youth committed to our charge?

Are we trying to make them docile and loyal members of some church or synagogue on earth, and to fit their souls for heaven? This is a legitimate end of education. In the course of human history more time has been devoted, more money given to education under the influence of this motive than under the influence of all other motives combined. This motive reared the mediæval monastery and the mediæval university; founded nearly every academy and college in Puritan New England; has been the pioneer of education in the denominational institutions of the West; is planting parochial schools in all the manufacturing centres throughout our land to-day. This is the ecclesiastical ideal. We respect what this ideal has done for education in the past; we ought to respect what it is striving to do today. In view of the great diversity of religious faith among our people, this ideal, however, is one which the public school cannot entertain. The common school must deal with matters which are common to all. But religious creeds and ceremonies are the very things, of all others, in which

at present there is least agreement and greatest diversity. However well this ecclesiastical ideal may work in communities wholly Puritan, like early New England, or wholly Catholic, like portions of Ireland and Canada to-day, it is utterly impracticable for the common-school system of the United States to-day. The ecclesiastical ideal, then, we may consider counted out.

Do we then support the public school for the sake of trained intelligent voters? Why, half the scholars in these public schools, unless there shall be a constitutional amendment enlarging the basis of suffrage, will never vote at all. And then do we pretend that Latin and French, and physics and chemistry, and the twenty or thirty branches taught in the high school are necessary to fit a boy to cast an intelligent vote? We have long since left this motive far behind in the liberality of our provision for public instruction. The political motive is not large enough to explain our devotion to our public school.

Do we then support the public schools in order that the children may be trained to earn their own living, and thus not become burdens upon the charity of the state? We frequently hear that motive assigned. But we all know perfectly well that not half the subjects taught in our public schools have any direct bearing on the ability of the boys and girls to earn a livelihood. We have gone far beyond the industrial ideal of public education.

Let me try once more. Do we support the public schools because we wish that these children, who are to be our neighbors and fellow-citizens, shall be intelligent, self-respecting public-spirited neighbors and citizens; that they shall be good husbands and thrifty wives; that they shall be wise fathers and mothers; that they shall be interested in what is noble and pure; enthusiastic in support of what is generous and just; that their homes shall ring with healthful laughter and happy song; that their work shall be wrought in integrity and their recreation shall be healthful and uplifting? Is anything less than this the ideal we really cherish? Will anything lower or narrower justify the splendid efforts we are making for public education?

I am sure there are few who will express themselves contented with the ecclesiastical, the industrial, or the political ideal. Without our knowing it, the social ideal of an intelligent, full, free, happy, human life for every boy and girl born or brought into our midst has gained possession of our minds and hearts.

General Francis A. Walker, speaking of the public school, says, "Here we reach an instance of an impulse almost purely socialistic for the enlargement of the functions of the state. It is true that the plea of a service to government, in the way of reducing violence and crime through the influence of the public schools, is often urged on this behalf; but I, for one, do not believe that this was the real consideration and motive which, in any instance, ever actually led to the establishment of the system of instruction under public authority, or which, in any land, supports public instruction now. Indeed, the immediate effects of popular instruction in reducing crime are even in dispute. In all its stages this movement has been purely socialistic in character, springing out of a conviction that the state would be stronger, and the individual members of the state would be richer, and happier, and better, if power and discretion in this matter of the education of children were taken away from the family and lodged with the government. Of course, it needs not to be said that this is a socialistic movement which deserves the heartiest approval."

We now have the social ideal before us in distinction from the ecclesiastical, the industrial, and the political. If any one of my readers can be contented with the narrower ideals of churchman, or economist, or politician, nothing that I have to say will appeal to him. Where ideals are radically opposed, it is useless to talk of methods and policies. If you care for nothing but the "soul" of your child; if you value nothing but the wages he can earn; if you think of nothing but the vote which he may cast; if you look down upon the great mass of children as doomed to lives of dull drudgery and unenlightened toil; then in the name of all that is progressive, all that is hopeful for the future of humanity; in the name of all who love little children and have faith to believe that every child is capable of noble manhood or womanhood; in the name of the social spirit that animates the modern world, I bid you farewell.

Such as love children; such as believe in the possibility of a joyous and noble manhood and womanhood for every man and woman, regardless of station or occupation; such as look for a unity of spirit amid diversities of service in the members of society; such as hope to see common sources of enjoyment shared by persons of very different degrees of wealth; such as believe in a socialism of the intellect and a communism in the enjoyments of the mind—such, and such alone, I ask to consider with me the social mission of the public school.

This world in which we live is established through wisdom; founded on truth; governed by law; clothed in beauty; crowned with beneficence. The business of the school is to open the mind to understand that perfect wisdom; to appreciate that wondrous truth; to respect that universal law; to admire that radiant beauty; to praise that infinite beneficence.

Humanity, of which we are members, has brought forth great men and glorious deeds: it has formed languages and reared civilizations; it has expressed its ideals and aspirations on canvas and in stone; it has uttered its joys and sorrows, its hopes and fears, in music and poetry. The province of the school is to interpret to the scholar these glorious deeds of noble men; to open to him the languages and civilizations of the past; to make him share the pure ideals and lofty aims of artist and architect; to introduce him to the larger world of letters and the higher realms of song.

Nothing lower than this interpretation of nature and humanity to man can be accepted as the end of education. To make one at home in the world, and friends with all which it contains, is the object of the school. The forms of natural objects, the laws of life in plant and animal, the principles of mathematics and physics, the languages which nations speak, the literature in which they have expressed their sorrows and joys, their hopes and fears, their achievements and aspirations; the laws of economics, the institutions of society, the insights of philosophy, the ideals of ethics and religion—all these things are man's rightful heritage, and it is the aim of education to put man in possession of this rich inheritance.

It is the attempt to reconstruct the common schools with a view to the realization of this social ideal of education which, consciously or unconsciously, is behind the various changes in programmes, methods of instruction, and principles of administration which, taken together, constitute what is called the new education. Viewed separately, out of connection with this controlling aim, these innovations doubtless look like whims, fads and excrescences. Viewed in the light of their common purpose, and in their relation to what I have called the

social mission of the school, these changes are seen to be indispensable means for the accomplishment of this social ideal of education.

Let me now leave this ideal for a while and consider some of these means by which the new education is striving to realize it.

First among the new features of our new schools comes physical culture. In the earlier stages of human evolution man was compelled to struggle with his physical environment; and in the struggle the physically weak were driven to the wall. Now, in our highly complex social conditions, the struggle for existence is not so much that of man against nature as that of man against man. Mental rather than physical quality, nerve rather than muscle, counts for most in the struggle for existence which goes on to-day. Hence the physical, being less immediately essential, and not being kept up to its previous standard by the necessity to wrest the means of subsistence from the forest and the furrow, has been suffered to decline. This artificial premium on nervous and mental force has stimulated the development of the mind at the expense of the body. But nature cannot be cheated long. Already she is beginning to enforce her penalties. Insomnia, dyspepsia, nervous prostration, heart-failure, insanity; these are the universal tokens of outraged nature's righteous wrath. Into this fierce competition, into this high nervous tension, the boys and girls of our schools must go. It is the duty of the school to shield their early years from all needless strain of anxiety and worry; to prohibit all forms of overwork; and to insist that in these formative years the body shall at least keep pace in its development with the mind. To this end the introduction of physical culture is a necessity.

Wherever the experiment has been fairly tried and tested, its results abundantly justify the expenditure of money and time involved. At Bowdoin College we require every student to take systematic exercises four days of every week in the winter months of each year of the course. We spend as much money on this as on any department of the college, and a comparison of the rank of students in scholarship and in physical development shows that the two lines of development tend remarkably to coincide. The majority of those who were first-class in study were first-class in physical development; the majority of those who were second-class in study were second-class in physical development; and in the third class the coincidence between poor physical development and inferior mental power was remarkable. The positive and decided benefit of physical exercise to growing students is strikingly shown by tables recently published by the Department of Physical Training in Wellesley College, giving the relative changes in physical development of three classes of girls in that college from November, 1892, to May, 1893. The first class consisted of forty-three members of class crews; the second class was made up of twenty students who took five months of Swedish gymnastics in the gymnasium; the third comprised twenty students who had no physical training during this period. In girth of chest, those who rowed gained 1.04 inches; those who took gymnastics gained 1.1 inches; those who took no training gained nothing.

In capacity of lungs, those who rowed gained 20 cubic inches; those who took gymnastics gained 14 cubic inches; those who took no training lost 2 cubic inches. In strength of back, those who rowed gained 20 pounds; those who took gymnastics gained 20 pounds; those who took no training lost 16 pounds. In depth of chest the rowers gained .4

of an inch, the gymnasts .3, and those who took no training lost .1 (one-tenth). In breadth of shoulders the rowers and those who took gymnastics alike gained .7 of an inch, while those who took no training gained nothing.

The strength of a chain is the strength of its weakest link. The weight and substance of a tool are as important as the keenness of its edge. If the school is to fulfil its social mission of the training of boys and girls for healthy and effective manhood and happy and serene womanhood; if it is to equip them to stand the strain of business competition and to bear the burden of household care, it is bound to train sound bodies as the basis of sound minds.

Manual training is an essential feature of the social mission of the common schools. It unites mind and body in harmonious development and healthful exercise. Those who are to be artisans need it, if industrially we are to keep pace with the manufacturing nations of Europe in the skill of our workmen and the artistic finish of our manufactured goods. The surgeon, the dentist, the artist all need it for their professions. But they need it most who will never use it in these special ways. No man can thoroughly appreciate a good thing made by another, unless he has some faint conception of how to make the thing himself. Manual training is essential to elevate the taste of the consumer as well as to increase the skill of the producer. It is necessary as a common bond of appreciation and fellowship between rich and poor. This is its great social mission. Says Felix Adler, "Twenty-five years ago we fought to keep this people a united nation. Then was State arrayed against State. To-day class is beginning to be arrayed against class. The chief source of the danger, I think, lies in this, that the two classes of society have become so widely separated by difference of interest and pursuits that they no longer fully understand each other, and misunderstanding is the fruitful mother-source of hatred and dissension. This must not continue. The manual laborer must have time for intellectual improvement. The intellectual classes on the other hand must learn manual labor; and this they can best do in early youth, in school, before the differentiation of pursuits has yet begun.

Manual training calls into eager and enjoyable activity the whole power of the child; and thus crowds out the baser passions that root themselves in idleness and inactivity. It awakens self-confidence and dignity; and founds the sense of personal property on its true foundation in labor performed. By giving a tangible and interesting object to work for, it stimulates attention, concentration, perseverance and continuity of effort as no formal exercise of abstract will could ever do. It awakens latent constructive and artistic powers which would otherwise become atrophied by disuse. It stimulates invention, and cultivates taste. In the power to labor diligently and patiently with hand and eye it lays the firm foundation for that patience and industry of mind on which all worthy intellectual achievements rest.

(*To be continued.*)

A public school is a State institution, where children are educated to be good, noble men, and loyal, useful citizens, and the State is within its right in having such an institution.

Next to the Home and the Church, the Public School is the most important institution in modern society for the benefit of mankind. The school is the sphere of the State, the Home is the sphere of the parent, and the Church is the sphere of the prophet of God.

THREE GREAT PROBLEMS.

BY JAMES M. GREENWOOD.

IN all ages of the world the child has ever been an object of the deepest solicitude, and the idea that it was not studied, its wants and its desires catalogued and commented upon, is to deny the very strongest precepts inculcated by the wise and thoughtful men and women of all ages. As an evidence of this fact, the Bible bears testimony of no uncertain kind, as the following quotations, picked up at random, show: "When I was a child, I spake as a child, I understood as a child, I thought as a child." Certainly the Apostle carried himself back into his child-life, and he was conscious of a continuous growth from that period in his existence to the time when he uttered the sentence here attributed to him.

Again, was not this query propounded nearly nineteen hundred years ago? "What manner of child shall he be?" Is not this the same question that trembles to-day on the lips of every mother in the civilized world? Although we are perhaps wiser than Solomon, yet he had studied child nature so thoroughly that he says: "He that spareth the rod hateth his son, but he that loveth him chastiseth him betimes." But it is needless to multiply quotations from the literature of ancient and modern times to establish a fact so well known.

My object is to call attention to a popular fallacy that is now palmed off by many writers and lecturers, who imagine that they have entered upon a field that had lain fallow through all the past. The child's life is only one segment of its life as a human being, and the assumption that there is nothing to be learned of human nature except from the study of the child, is a proposition so at variance with experience, that it has only to be stated in order to expose its shallowness.

Out of all the mass of heterogeneous material that has been collected, and partly published, bearing upon Child Study, a few material facts of value to teachers are emerging into prominence. Only a small portion of the data yet given to the world, in one form or another, possesses any educational value, yet from the vast mass of accumulated experiments, some few very valuable results have been reached, which may be stated as follows:

1. The large vocabulary of spoken words possessed by the child at the age of six years. Instead of having *only a hundred or two hundred words* it can use, it may have from one to two thousand words, and it knows the meaning of a great many more words.

2. All hand and arm work of young children should exercise at first the larger muscles of the hands and arms instead of the smaller and more delicate muscles. This overturns a great deal of the finer kind of work done in the kindergarten school, as well as the small handwriting in the very lowest grades in the ward schools.

3. That systems of drawing based upon points and lines are not adapted to the wants or likes of children before the ninth or tenth year.

4. That the eyesight and hearing of children should be tested when they enter school, or at any subsequent period in their school life. Many supposed mental defects are purely physical.

5. A greater interest in the children themselves, and a keener insight

into their habits, dispositions, and peculiarities.

6. A more specific aim and definiteness in regard to the work of each child, and a better understanding of the excesses and defects of mental, moral, and physical traits of mind and body.

7. A more hopeful and sympathetic regard for the defective pupils, especially those who cannot hear or see well, and the manner of seating them in the school-room, so as to receive the greatest benefit from the class and other exercises.

8. That some children, say about six or seven per cent., are born *mentally short*, perhaps a somewhat larger per cent. are born *mentally long*, while the others are average in all respects. Both the extremes require extra attention.

9. To obtain a more comprehensive insight as to the means and methods to be employed in handling unruly and vicious pupils, and how to arouse them to a better course of conduct by appealing to their notions of justice and kindness.

In view of these facts, teachers will see that it is important to study the physical as well as the mental characteristics of all their pupils for the purpose of understanding them, and of being able to minister to their special wants in the most satisfactory manner.

In my judgment, a society should be organized here for the purpose of studying children with special reference to school work, and upon a different basis from any other like organization in the country. At present I do not know of any systematic plan of work that has been adopted; much that has been done is so much like German philosophy—"just becoming"—that it has no direct practical bearing on the work of the school-room.

In our deliberations upon the education of children, doubtless all agree with me that the time for hair-splitting differences in reference to mere opinions is unprofitable, and that we must devote our time and energy to some wider and more comprehensive scheme of work than we have hitherto done, if we wish to be leaders in those great movements which have for their object the general improvement of the moral, social, and intellectual condition of our state and country. While we see clearly the two conflicting opinions now held by people concerning the nature of education as to whether it is a practical or theoretical art,—those of means and end, and whether the child in passing through the preparatory stage of its existence is to be made into a practical, shrewd, calculating machine that by dexterously manipulating human forces can secure a competence by his wits, and destitute of a conscience, presents a problem which has to be worked out like any other question of business. If this be the end of our work, then we should see to it, that we educate for shrewdness, trickery, rascality, ingratitude, and all those ignoble qualities of mind which stigmatize man's nobler faculties. While we agree that the intellectual natures of our children should be developed in order to know things correctly and to pass judgment on the various issues that arise from association with others, and to exercise large foresight in the management of affairs, yet the highest acme of human greatness is never reached through the intellect alone. The intellect is the region of cold abstraction. It touches life in seeking ways and means of action, but without reaching the better side of human nature—sympathy—it is cold, hard, cheerless, and oftentimes cruel.

Thus are we brought face to face with the question, what system of instruction combines the greatest

amount of good for the child and the least evil? To find what is the best teaching and to persuade others to adopt it as the best, is a part of our mission. No elaborate argument is required to demonstrate that there is much selfishness as well as much goodness in the world. Sorrow and suffering, misery and wretchedness, are everywhere. Shall these ills be lessened by our work? Is it better to alleviate the sum of human woe or contribute to it? Is it better to instil into the hearts and consciences of our boys and girls respect for truth and the rights and happiness of others, *than to seek advantages* by resorting to cunning and sharp practice? Shall we educate to form noble characters? I imagine which of these two theories you believe to be the more important, among a people whose cardinal doctrine has ever been on the side of those higher virtues extolled in history and in song.

No one believes that all who are called teachers, are capable of giving instruction on the very highest plane of intelligent skill. The material to be worked with may be of a low order and no institution can be worked up to its most advanced ideals. All the conditions should be favorable, and then the worker sees clearly enough what must be combined advantageously to approximate good results. Knowledge and skill, here as elsewhere, play a not unimportant part in the interaction of those forces called education. Schools and systems of education are the work of the human will. Human agency makes them what they are. Like all things human they may be good or bad. When they incorporate low ideals and have no means within themselves of correcting themselves, progress has been retarded and the human mind stunted in its growth.

No school or system of schools can work itself. Like all other human agencies it has to be directed, perhaps by persons of very ordinary ability. But by virtue of the laws and the executive head of a school system operating under such authority, it is reasonable to suppose that those who plan and execute the work entrusted to them will acquaint themselves fully in regard to the duties that they are chosen to perform. They must be willing and able to fulfil all the conditions of thought and action necessary to accomplish the purposes of the institution. To subdue violent passions, to place judgment above pride and arrogance, to practice forbearance, *to forego private conflicts*, the avenging of supposed wrongs, are some of the results to be reached. But if one be more disposed to connive at questionable acts, or to injure property and character, then, such a one cannot be expected to look forward at life as it is projected into the future. While these moral influences are operating all the time in the formation of character, other insuperable difficulties frequently lie in the pathway to success. The amount of hindrances in every community is always an indefinite quantity which cannot be estimated in precise terms. It may be so great as to render any high form of work impossible; but this hindrance, be it much or little, should never come from the actual teaching force itself. To take advantage of the existing habits and feelings of the community is the first step in the line of progress; to educate the children by and through the aid and positive influence of the parents and of the community, and not in opposition to the community, is the first care of the educator.

There is no limit to the capacity of people to do new things or to attempt new experiments. This is shown in a thousand ways in this country. One with a belief that he can do something to benefit others, is a

stronger social power than a score who are governed by no fixed principles. History proves the strong social force a powerful mind becomes in shaping the destiny of a nation, when it works for the accomplishment of great ends. We are to work for the spread of deep moral convictions, and for that steadfastness of character that prefers death to dishonor.

It is what men think that determines how they act. Low thoughts generate low planes of action. If the teacher's motives are not elevated, the blight spreads over the school and moral debasement ensues. Our theory of education must depend upon those social elements which constitute good society—one in which reputation, property, and life are protected. Then interests of life are complex — oftentimes jarring. The ideal school is for the purpose of reconciling these diverse interests. Then, let no dark spots of hatred, malice, envy, or jealousy be found lurking in the heart of any one connected with our system of public schools, and if there should be one unfortunate so distressed, let the foul stain be wiped out or smothered forever.

It would seem that the vital forces of society may be classed under two heads—order and progress, and that these are also the two grand watchwords of education. Order may mean the preservation of peace, where violence has ceased, and where those aggrieved apply to arbitration for the redress of injuries. In the school this truth is inculcated under that rule of action,—each must respect the rights of all, and all must respect the rights of one. The recognition of personal rights and obligations is a forward step in the educational progress of any state or nation, and it is one of the first lessons the child learns in school. And unless teachers insist upon this principle of conduct, the best intellectual teaching becomes a dangerous engine of mischief in the hands of a giant who wields immense power dangerously.

In the discussion, we may pause a moment to ask what are those qualities in a good citizen that are instrumental in keeping up good conduct, prudent management, and the progressive forward movement in society? As a practical working basis, perhaps most will agree that the essential characteristics are *industry*, *honesty*, *justice* and *prudence*. The growth of the higher and nobler virtues in any community is the surest index to general improvement. A community in which dishonesty, falsehood, and enmity have their dwelling place, is not the one in which activity, enterprise, courage, and progress are often found. It is a common observation that those who relax their former industrious habits of care, thoughtfulness, and industry, seldom long retain their good fortune at its height. Teachers must be always on the alert, watching for the new in every direction and making original discoveries. Nor should we define education as a continual struggle against those deteriorating qualities which drag human nature down to a lower level, but rather to an uplifting force which makes goodness of heart and beautiful conduct the highest achievevents of the individual. When each one knows for what he or she is responsible, and this is known to others, and the duties are properly and proportionally distributed among those who do the work, and a methodical order is established for transacting it, less friction is caused and bitter feelings are seldom engendered.

So far, I have endeavoured to encourage professional sincerity and the full development of individual responsibility in our pupils as well as among ourselves, and to show that charity and sympathy are the bonds among

all classes to hold society together. If I have uttered warnings, they have sprung from a deep-seated conviction that there are vicious tendencies in our social system which will react injuriously upon the individual character and the national life. Whatever of good appears in our national life must come largely through our schools.

What effect a set of ideas may have upon a community, is a theme worthy of the pen of the greatest delineator of active life. There is a rank of mind as well as of birth. Have you discovered the locus of your own—its hopes, aspirations,—sounded all its depths and found them pure and tranquil? Do your thoughts and actions inspire any lofty sentiment or excite a deep interest in the minds or hearts of others that are struggling upward to reach the light? Are you a leader of one or many? Wherefore? Are you willing to disturb some settled ideas so that when they settle down again, they will be at a higher level? As you look down the great thoroughfare of life is it bright and clear, or does it stretch out into mist and rain? Does your real life expand as your ideal life recedes? In settling everything have you unsettled all things in your creed? Does hope still pervade all your efforts? Does the reflection in your world show the streams clear and rippling, or are they dark and muddy? What is the state of your own soul as you lead others into the broadening ways of life? Does life suggest terrible problems to which you can find no solutions? It will ever be so; but can we not solve those simpler ones that now rest in the lives near to us? What sav you? Yes, fierce contests, rude passions, bitter tears drawn from all the fountains of human misery may confront you, but through all these there stand out in bold relief the beauty, the glory, and the dignity of human character, toiling for the grandest purpose in life,—lessening suffering and sorrow everywhere. To aim at something higher, the largest types of beauty and goodness, are these not worth living for?

Remember that in the school-room, each child's heart is a world within itself. Its experiences are like no other. It is here in each heart that the sympathetic teacher pours the balm which comforts grief, softens anger, chastens affliction, and awakens resolves that perchance have lain dormant for years. This is indeed life. Teachers, will you not try to lift the pupils up to the dignity of exalted culture and high character? Unless inspired by these holy sentiments, your teaching is in vain. If you say, we are a minority, how can we build these characters into such a social structure? Need I remind you that history tells us the great events of the world have sprung from minorities, turned into majorities,—but these minorities were never hopeless. With hope and energy we can move and mould the opinions of a state.

Each child must be known as what it is within itself. No education can make two individuals exactly alike. The experience of each life differs from all other lives. Some lives have no sunshine—no flowers. Shall we not furnish some of these poor distressed ones with both? A recent writer has said,—Man gets on by a spring in his own mechanism and he should always keep it wound up. But this spring should not be the hectic fever caught from the child of hope. The passion of our lives should be to relieve and diminish human suffering. If, as teachers, we have not this true missionary spirit, our efforts are as sounding brass and a tinkling cymbal. Somewhere in her writings George Eliot says:—"My own experience and development deepen every day

my conviction that our moral progress may be measured by the degree in which we sympathize with individual suffering and individual joy."

The great question of the hour is,—Have you the true mind for teaching? I believe that you have. Charity and good feeling should characterize all you say and do. Remember, too, the strangers among you. A kind word, a willing hand, and a loving heart, will accomplish wonders in making them feel at home.

In hours of trial, of difficulty, and of doubt, you know where to find me. It is my duty and privilege to consult and advise with you then. I will always try to be just, frank, fearless, and honest with you. Your success first, without deception, is the only line of conduct that will guide me. But when the skies are clear, the pupils good, and the parents kind, then indeed am I more than glad to see you. Never hesitate to ask me a question in regard to your work or your success. We are co workers in the same field. Our interests are the same. Go, then, into the school Monday morning, determined to be better teachers, better and kindlier men and women than ever before, and success will crown your efforts.—*School Journal, New York.*

On being asked how he made his great discoveries, Newton replied, "By intending my mind on them." Tolstoi, too, unconsciously following the line of the great physicist's thought said that the first element of talent is an intending or intense concentration of the mind, leading to insight.

SOME NOTES ON POETRY FOR CHILDREN.

THE mass of material which is indicated by the phrase "Children's Poetry" is roughly to be divided into two classes, subjective poetry and objective poetry. The subjective deals with children's thoughts and the state of childhood, mostly from within, and very frequently is genuine poetry; the objective is narrative and descriptive, written entirely from without, and is rarely anything but rhyme and metre combined to instruct, amuse, or entertain. (The word "poetry," however, may be retained as a term of convenience, if not as an accurate description.) Examples in the subjective class are the child poems of Wordsworth and Blake; good specimens of the objective class are "John Gilpin," and "James and the Shoulder of Mutton." With subjective poetry children have no sympathy—they do not need it, for every child is its own poet; but to grown-up people who once were children and can remember, it may offer rich enjoyment. Hitherto in collections of poetry aimed at the heads of child readers, the relative proportion of the subjective kind, which they cannot begin to comprehend or appreciate, to the objective, which they do like, has been as ten to one or even greater. I think it is time that this injustice should be removed. I think children deserve to have a volume of persuasive, fascinating verse which they may read or listen to from cover to cover without suspicion and without drowsiness, prepared for them with that singleness of purpose which directed Mr. Henley when compiling his admirable "Lyra Heroica" for boys; while for adult readers might be gathered within two covers a posy of the best poetry

about children, fitted by its truth and beauty to keep their hearts green and sweet. As it is, neither of these collections exists, although not a few are to be obtained which hold material enough to form the nucleus of each. For the sake of convenience when referring to them later, let us call these two necessary collections the Grown-up's Anthology and the Child's Anthology.

The best-known collections of children's poetry (so called) are Mr. F. T. Palgrave's "Children's Treasury of English Song," Mr. Coventry Patmore's "Child's Garland of Verse," and Mr. Andrew Lang's "Blue Poetry Book," the respective editors of which seem to have compiled in the main for themselves, and then, by way of averting a charge of selfishness, to have addressed the book to a younger generation. Before looking into these anthologies, it should be understood that one finds fault only with their avowed destination. As a collection of poems about childhood each in its own way is delightful, although even then not satisfactory. It is as vehicles for the entertainment of young readers that they are so sadly to seek.

Among the total number of pieces in the three collections I find not more than thirty which should be included if the pleasure of the child were the sole concern of the editor. These are, almost without exception, narratives, and as such should be chosen for their interest as stories, and not for intrinsic poetical merit at all; although, on the other hand, a good tale presented in conspicuously bad verse would of course be omitted from such a volume as is here foreshadowed. Each of the three editors draws largely upon Wordsworth. I should take not a line. Each of the three editors quotes Gray's "Elegy." I should as soon think of printing Pope's "Essay on Man." Mr. Lang borrows freely from Burns; and how the future is discounted! On the other hand he gives Peacock's "War Song of Dynas Vawr," which is a discriminating choice, and Macaulay's "Armada" and "Ivry," and, as might be expected, several of the finest of the old ballads. These selections are, I think, good; but I would omit the "Ancient Mariner," as being too good. Each of the three editors offers much of Blake. There, again, I think them wrong. Blake sang of childhood in the abstract, and to men and women whose hearts are right he is a fount of pure joy; but children care nothing for childhood in the abstract —and well for them that it is so. A bad fairy seeking at the cradle-side for a luckless gift could not bestow upon a child aughtless enviable than the habit of self-consciousness.

In place of the abstract pieces, and any insistence on the condition of childhood, I should like to see more fun and irresponsibility. The Child's Anthology should amuse and delight from first page to last; it should, although not in itself poetry, *stand for* poetry in the minds of its young readers, and convince them that poetry is a good thing and a pleasant, and thus, instead of being indifferent to it, or worse, prejudiced against it, they would be prepared for the time when, like Aurora Leigh, they "chanced" (as all of us should) upon the poets in reality. To a mind that is not ready for it poetry presents few attractions, and these are diminished rather than augmented by the encomiastic statements of relatives and instructors. The governess's approval of Gray's "Elegy" does not make its portentous solemnity any less depressing to her pupils, unable yet to perceive its beauty; and to confront the childish reader with Wordsworth's great "Ode on the Intimations of Immortality" (as Mr. Palgrave does) may lead him to believe that it is not

heaven, but the other place, that lies about us in our infancy.

How many of us there are who have kept from the right attitude towards certain poems for no other reason than that in our young days we were incessantly called upon to learn or to admire them! If, however, we had been given a volume of verse of the kind we were ready to enjoy, which, as I have said, had *stood for* poetry in our minds, we should have known no such barrier. Such a volume should entertain throughout —it should offer legend, narrative, and fun. It should be as gay as it could be made, compatible with technical excellency.

The Child's Anthology would not be easy to compile. On the other hand the editor setting about to prepare a book likely, by the emphasis which it laid upon the blessedness of the state of childhood, to turn mature thoughts very pleasantly, if somewhat regretfully, down the backward way, would find an abundance of fields in which to glean. And he would find, too, that several sources from which, at the first blush, one would think to borrow largely for the Child's Anthology are suitable only for the Grown-up's. There is, pre-eminently, Robert Louis Stevenson's "Child's Garden of Verses." Only the other day no less a critic than Mr. Traill was remarking upon the gain to the British nursery afforded by this book, and yet our ideal editor for young readers would take not more than a mere sip from itspages. He would hold that it is not a child's book at all; he would hold that it is essentially matter for men and women, and is not to be opened until we are on the other and less delightful side of that phase of life of which it tells. To hand the book to children, he would say, and bid them learn it, is to manufacture so many second-hand Stevensons. Every child, more or less intelligently, does this kind of thing for itself, and in heaven's name keep it original! "A Child's Garden of Verses," however, may as well keep its reputation as a nursery classic, for it thus remains one of those books which parents buy for their children in order that they may read them themselves. Every Christmas there is a wave of such reflex generosity.

"A Child's Garden of Verses" is the ideal field for the Grown-up's harvester. It stands alone. There is nothing like it, so intimate, so simply truthful, in our language, in any language. Herein the poet (at last one may use the words "poet" and "poetry" with no reservations) has accomplished that most difficult of feats; he has recaptured in maturity the thoughts, ambitions, purposes, hopes, fears, philosophy of the child. We have speech from

> . . . the immortal
> Child tarrying all his lifetime in his heart.

It is our joy, as we listen, to recapture them too. To say "Such an one was I," "Just so did I behave," "I also hunted behind the sofa back." The man of genius who can draw from his charmed reader a genuine "I also," is assured of a niche in the heart. The "Child's Garden of Verses" is one of those books which inspire the feeling—almost the passion —of gratitude. As we read our eyes are a little moist—with satisfaction; and now, when the words have the sympathetic alliance of Mr. Charles Robinson's pencil, more so than ever. (Never were author and artist in closer accord. It adds matter to our grief for Mr. Stevenson's early death that he could not see these winsome pictures, especially perhaps the last.) As we read, years fall away, wrinkles are smoothed out, the envious crow removes his foot, world-knowledge so bitterly acquired evanesces. and once again the man is a child at play, and a bird is singing in his heart as of old.

I said just now that in reading these verses, we can exclaim "I also." But that was a slight exaggeration. Only a very few readers could honestly say that, for the Stevenson child is a child of genius, removed from the ordinary child by a wide gulf. It is true that a philosopher has recorded his belief that every child has genius; but, even if that be so, there are degrees. It is given to few to possess the wisdom and imaginings of this little gardener. The difference between the child of genius and the ordinary child may be illustrated by quotation. The ordinary child, impelled to verse in the presence of a cow, remarks:—

> Thank you, pretty cow, that made
> Pleasant milk to soak my bread,
> Every day and every night,
> Warm and sweet and fresh and white;

and so on. The child of genius says:

> The friendly cow, all red and white,
> I love with all my heart;
> She gives me cream with all her might,
> To eat with apple tart.

And take these lines, called "System" (noting what an advantage it is when child and man collaborate in a book about children—the child gives the essence and the man the titles:)—

> Every night my prayers I say,
> And get my dinner every day,
> And every day that I've been good,
> I get an orange after food.
>
> The child that is not clean and neat,
> With lots of toys and things to eat,
> He is a naughty child, I'm sure!
> Or else his dear papa is poor.

The first seven lines might conceivably have been written by any average young rhymer. In the last—such a sweet reservation!—we have the child of genius again. And there is vision in this description of a fairy land, as a place:—

> Where all the children dine at five,
> And all the playthings come alive;

and in the thought as as he launches his boats:—

> Away down the river,
> A hundred miles or more,
> Other little children
> Shall bring my boats ashore—

vision that would be impossible to the ordinary child. Similarly in this pronouncement on "The Whole Duty of Children," the genius is in the last line:—

> A child should always say what's true,
> And speak when he is spoken to,
> And behave mannerly at table;
> At least as far as he is able.

But with all deference to Mr. Traill, this is not food for young readers. The fact that Mr. Stevenson is always on the side of the nurses does not make him a writer for the nursery. To press poetry into the service of the disciplinarian is to mistake its function. What could be more delightful to read than this optimistic "Thought," with its humorous vagueness:—

> The world is so full of a number of things,
> I'm sure we should all be as happy as kings.

—and yet how disenchanting would it be to hear the sentiment uttered by one's own little son! These things *should remain implicit in childhood*; and when expressed, expressed by deeds, not words.

One reflection that occurs and recurs in childhood, and should be illustrated in the Grown-up's Anthology, finds no prominent place in Mr. Stevenson's pages: the unreason of grown-up people. The spectacle of their elders wasting their opportunities for enjoyment troubles most children. A poem in a modest, thoughtful volume entitled "Studies in Verse," by Charles Grant, which appeared in 1875, expresses a little girl's views on this question very

neatly. She has taken a doll into her confidence, and beginning with the postulate (which every one will grant) 'Grown-up people are so stupid, Dolly dear," particularizes thus :—

There's papa now—if he wish't it
He might play;
Yet he reads, and writes, and ciphers
All the day.

And mamma, when no one's looking,
You should see,
Only takes one lump of sugar
In her tea.

Now, if I were big, Miss Dolly,
Do you think
I would look at nasty paper,
Pens and ink?

I would scamper through the greenhouse,
Chase the cat,
And I'd live on sugar-candy,
Think of that!

It is not given to all children to be philosophers, but every child makes believe, and every child looks bravely into the future, and indulges in generous building schemes. For the best make-believe poems, which would constitute a large section of the Grown-up's Anthology, we must go again to the "Child's Garden;" there the standard is once more set. Look, for example, at the "Land of Story Books:"—

At evening when the lamp is lit,
Around the fire my parents sit;
They sit at home and talk and sing,
And do not play at anything.

Now, with my little gun I crawl
All in the dark along the wall,
And follow round the forest track
Away behind the sofa back.

There, in the night, where none can spy,
All in my hunter's camp I lie,
And play at books that I have read,
Till it is time to go to bed.

These are the hills, these are the woods,
These are my starry solitudes;
And there the river by whose brink
The roaring lions come to drink.

I see the others far away,
As if in firelit camp they lay,
And I, like to an Indian scout,
Around their party prowled about.

So, when my nurse comes in for me,
Home I return across the sea,
And go to bed with backward looks
At my dear land of story-books.

(To be continued.)

HISTORY OF MONEY.

Showing Kinds of Money Used in Different Stages of Civilization.

A STUDY of the growth of money may be useful just now in order to give a more definite idea of exactly what money is, and to learn why certain articles or substances have been discarded and others retained. The natural and general tendency well understood, we have only to judge the future by past experience to predict what will and what will not be the principal money metal of the near future.

HUNTING AND FISHING STAGE.

The kind of money in use in many countries indicates the degree of civilization attained. Man probably first became a trading animal in the hunting and fishing stage. Weapons of war and the chase, together with skins and furs, were then the most important kinds of property. Hence we find that the more useful, stable, and portable of these articles were first

used as money and are so used to-day in barbarous countries.

Beaver skins, or "beaver," was the unit of value when our forefathers traded with the Indians. Thus one beaver equals one brass kettle; one beaver equals two shillings; six beavers equal one gallon brandy, etc. Fish-hooks formed the currency on the northern shores of the Indian ocean from Persia to Ceylon. Latterly, however, pieces of bent wire were substituted for real hooks. Wampum was the currency of the more civilized Indian tribes in New England and Long Island. It consisted of white beads, made from the ends of a periwinkle shell or black beads made from a clam shell arranged in strings or belts. It became the official money in New England and New Amsterdam and lost its place as money between 1650 and 1700, when the "Smart Alecks" among the whites began to debase it by leaving the beads unpolished or unpierced or by making them of bone, horn, glass, and even of wood. The colonists legislated much trying to fix prices, and to save wampum from declining in value, but it was being produced too cheaply. Natural law was against it, and it had to go down.

The use of shells as money is still common on many tropical coasts. Their wide use is probably due to the strong passion, common to primitive man, for personal adornment. This gives shells a permanent value. Besides, they are very durable, comparatively light, and are convenient for small change. Whales' teeth, arrowheads, beads, tusks of ivory, and engraved stones are some of the other money materials of this later stage of civilization.

THE PASTORAL STAGE.

Man early tamed the domestic animals. The sheep and the cow being the most useful, they naturally, with their skins (and sometimes with their milk), formed the currency and the unit of value. Our words fee, pecuniary, and capital come from the use of cattle as money. Similar words in nearly every language testify to the once general use of cows and sheep as money. A man's wealth was estimated by his herds and flocks.

It was in this stage that conquerors stopped eating captives because it was discovered that they were worth more as shepherds and carriers of water, wood, etc. Hence, also, slaves often figured as money.

AGRICULTURAL STAGE.

In the agricultural stage man owns land, has fixed habitations, and is possessed of a far greater variety of prosperity than when he was a nomad. Though he continued to use cattle, slaves, etc., as money, yet he sometimes added staple farm products, and began to use metals, especially copper and gold, which at first were usually estimated in terms of cattle and were measured roughly instead of being weighed.

Wheat, barley, and oats are now, as they have been for 2,000 years, a medium of exchange in Norway and other remote parts of Europe. Maize or Indian corn, once formed the currency of Mexico, Central America, and some of the early colonies. Tobacco formed the principal money of Virginia and Maryland. It was legal tender in Maryland in 1732. The price of wives varied from 100 to 150 pounds of tobacco. Dried codfish was once currency in Newfoundland. Sugar, rum, ginger, olive oil, eggs, indigo, and molasses are some of the products that have been used in different countries.

MANUFACTURING STAGE.

The manufacturing stage is not clearly defined. Hoes were once money in China and they are to-day

in Annam. Little hoes took the place of real hoes and became true money.

Hand made nails once circulated as money in some Scotch villages. Some of the other money articles that may perhaps belong to this stage are cotton cloth, straw hats, cubes of salt, tea, beeswax, knives, and silk cloth. It was probably in this stage that the precious metals began to be measured and weighed more accurately and to be cast into standard forms.

COMMERCIAL STAGE.

1. *Internal Trade.*—When men began to live in cities, to have regular markets where products were exchanged, and to be shopkeepers or merchants and professional traders, there was a great need of a more exact and scientific money such as could be supplied only by the metals. These began to be cast or stamped into the regular forms, sizes, or weights. Bronze bars and stamped bronze pieces were used in Greece and Italy. These bronze pieces show the evolution from cattle money to stamped metallic money. Weights in the form of sheep indicate that sheep were in Biblical times the unit of value in Palestine.

Iron was used as money in Sparta. Pieces of bent iron ready for the blacksmith pass as money in west Africa and elsewhere.

"Cash" or "sapeks" or "le" is the only native coin and the legal tender of China as well as the principal money of small accounts. Cash consists of round disks of a kind of brass with a square hole in the centre. The evolution of cash is interesting. About 200 B.C. the Chinese were still using a bronze currency representing knives 5 2-5 inches long, with a hole in one end of the handle. By 500 A.D. the knives were 7 1-5 inches long and the hole or ring was larger. Later the handle disappeared and the ring was attached to the blade, which was increased in thickness to give the same weight as formerly. Still later the blade was gotten rid of and the ring was pierced with a square hole for the string. Thus transformed, the original and cumbersome knife money became a comparatively convenient currency, though the value has depreciated greatly, partly because of reduced sizes and inferior quality of metal used.

Cash is the basis of all price computations in China. Considerable sums may be paid in gold or silver, but they are treated as merchandise and are bought and sold by weight without a government stamp to guarantee weight and fineness.

2. *International Trade.* — When trade became international, there was still greater need for the most accurate and reliable counters of value possible. Real coinage began when governments first guaranteed weight and fineness with an official stamp. A great part of this immense gain to commerce and civilization was lost when after a while monarchs began to abuse this coinage privilege and to break faith with their subjects by stamping light weight or otherwise debased coins as genuine. Such coins would continue in use, but would soon depreciate in value.

Gold was coined in Rome in 206 B.C.

The gold solidus weighed four scruples from 312 A.D. to 1453 and formed the basis of more modern European coins. The florin, coined in Florence in the fourteenth century, was the first regular coin of western Europe.

It soon became the recognized unit of value in commerce and was replaced only by the English sovereign, which has since remained the standard unit of value for international trade.

The commercial world has chosen gold as money because all things con-

sidered, it is better fitted for this purpose than any other metal or substance. It owes its position entirely to its intrinsic worth.

It has come by evolution and will not go even by revolution. We have passed the fish hook, wampum, tobacco, iron, and silver stages of civilization and have entered the golden stage. Each year sees some progressive country stop experimenting with the fickle and fluctuating silver standard and declare for the staple and world recognized gold standard of value. Possibly we may, by unusual legislation, make silver legal tender for awhile and drive gold out of circulation, but our commercial interests will continue to use gold, and soon all interests will be glad to drop Mexico and China and to return to the society of more advanced nations. —*Byron W. Holt, in the Evanston Press.*

"THE GROWING ILLITERACY OF AMERICAN BOYS."

THE Committee of the Overseers of Harvard College on Composition and Rhetoric last year very severely criticised the examination papers of the entering class, as indeed they had done three years before, and published specimens of them which were admitted on all hands to be deplorable. This was done on the ground that students came up from the leading preparatory schools in such a condition of unfitness, as regards their own tongue, that it was necessary for the college to spend much time, energy, and money in teaching them what they ought to have learnt already, To use Prof. Goldwin's language on this subject, "There was no conceivable justification for using the revenues of Harvard College or the time and strength of her instructors in a vain attempt to enlighten the Egyptian darkness in which no small portion of her undergraduates were sitting."

This report naturally excited a good deal of dissatisfaction among the schoolmasters, which has been much increased by the proposal of the committee to print this year the papers of all the candidates presenting themselves for admission to college from particular schools or academies—the Boston Latin School, for instance, and Mr. Noble's, and Messrs. Brown & Nichol's, and the Roxbury Latin—thus at once bringing into contrast the methods pursued and the results achieved in those schools.

The principals of these schools have accordingly filed the following protest with the Board of Overseers:

"We, the principals of the schools named in this report, wish to protest against the action proposed therein, for two reasons:

"(1.) Such a comparison as is suggested, of papers of candidates from specified schools, would establish a dangerous precedent, and is a new departure for Harvard College, which has been scrupulously careful in the past to treat all fitting-schools alike.

"(2.) We contend that sight translations from Latin, Greek, French, or German made in a limited time, under a great nervous strain, are not evidence of a candidate's general ability or inability to write good English.

"While we regret the growing illiteracy of American boys as much as your committee does, we cannot feel that the schools should be held solely responsible for evils which are chiefly due to the absence of literary interest and of literary standards in the community.

"No school shuns a discussion of plans and methods of teaching or a comparison of results achieved, but no school is willing to carry such discussion and comparison before the general public, which, from the nature of the case, cannot appreciate the true value of the evidence submitted, and must therefore draw false inferences.

"If your committee wishes for the sake of the common good to examine the methods pursued and the results achieved in our schools under existing conditions, it is welcome to make a most thorough examination and we promise it our cordial assistance, with full liberty to take any proper use of the results of its investigation."

This protest was referred back by the Board of Overseers to the Committee on Composition, which has reported on it to the Board, and the Board is to take action. The report sets forth that the object in proposing the publication of the examination papers was not to make an invidious distinction between schools, but by a comparison of the methods pursued in a few of the best schools, to get, if possible, some suggestion as to the improvement of the whole system. But this is a minor matter. What is most serious in the protest is the teachers' way of accounting for the deficiencies of their pupils and their objection to the public display of the result of the tests to which they are submitted.

The signers object to the publication of the examination papers, on the ground that the public is not competent to judge them. The public in this case, of course, means mainly graduates of colleges, parents of graduates, and generally persons interested in the subject of education. It is only these who would be likely to pay any attention to the papers. If it be true that this class cannot form an intelligent opinion as to the manner in which their sons and other relatives are taught to write and speak their own language; if the choice of methods and the estimate of results must be left entirely to the teachers themselves, the matter is indeed very grave. It would place these gentlemen in a much better position than any other profession in the community. Every other practitioner is judged by the results of his work—the lawyer by the results of his advice and conduct of cases, the doctor by the effect of his practice on his patients, and the minister by his influence on sinners. In no case is it left to him to say whether he has succeeded or not, though his art may be much more obscure and technical than the teaching of English.

The reasons why the teachers are not to be held responsible are, however, graver than the fact of non-responsibility. They say they cannot prepare the boys in the use of their mother tongue because of the "growing illiteracy of American boys," and they ascribe this again to "the absence of literary interests and of literary standards in the community." The way of accounting for evils, and relieving individuals from blame for them, by ascribing them to general causes, is a very old one. In the early days of the civil-service agitation there was a very widespread opposition to the passage of any civil-service law, on the ground that civil service reform must be accomplished by "the slow uplifting of human nature." In fact, nearly every abuse, has at some time in its history been defended in the same way. If it be true that "illiteracy" is growing among Ameri- boys, and there is "an absence of literary interest and standards in the community," the remedy would seem to lie in greater efficiency and energy on the part of the institutions which are specially charged with the duty of combatting illiteracy among youth. It would seem as if the preparation of the schools should be made sterner than ever, and the standards of the college higher than ever, so that everybody who meant to go to college should, from the time he put off petticoats, have in his mind the fact that not good athletics but good English was essential to his getting into college at all, and having "a good time" while he was there.

Moreover, publicity is the great modern remedy and stimulant, and if

this evil be as great as the schoolmasters say, it seems to us that publicity should be made to help us in its extinction. Schools should be made ashamed of their boys, and boys made ashamed of their English, by asking all men to listen to them. It is in this way that the best results are obtained in all walks of life. We should think ambitious schoolmasters whom the English of their pupils shocks, would welcome it. We do not believe that any agencies can do as much for reform as exposure. As long as boys and the parents remain under the impression that English is of secondary importance in school and college, and that defects in it will be carefully covered with the veil of secrecy or anonymity, so long will the illiteracy of Amercian youth continue to increase, composition continue to be ungrammatical and ill spelt, letters ill written and ignorant, handwriting scratchy and uneducated.—*The Evening Post.*

THE TEACHER'S "SCHOOL OUT OF SCHOOL."

HENRY G. SCHNEIDER.

EVERY vacation the teacher is met by the question, How shall I spend my vacation? The long vacation and the opportunities for travel are perhaps the one great advantage of teaching as a profession, and well do the majority of our teachers use their vacation hours. Yet there is a growing tendency to use the vacation improperly. Summer schools with inviting prospectuses are absorbing more and more of the time our teachers need for recuperation. Every teacher feels that he ought not to neglect his opportunity; that he must attend the teachers' conventions. There is grave danger that in embracing these opportunities and spending all, or nearly all, his vacation in study, or in nerve-wasting discussions with his fellow-teachers, that the purpose of the vacation is lost to view, and the teacher returns to his work brain-weary, fagged out, and tired. A Boston paper, in a recent editorial, calls attention to these dangers, saying: "When we consider that the vacation was given for recreation, one must wonder at the numerous summer schools, which have sprung up like mushrooms all over the country in the last decade, and which are being extended from year to year. No doubt these institutions have their good points, but the question involuntarily arises, whether it is advisable to continue during the summer months the strain on the intellectual powers of both teacher and pupil. Not only the child but the adult as well should enjoy a period of absolute rest from intellectual exertion, so as to restore the elasticity of the brain by change.

"The teacher should for a time keep at a distance all that can remind him of his professional work. Like the lawyer, he should bury himself in the backwoods, live on a farm, climb the mountain, or seek the lake, river, or sea, where nothing can remind him of his work.

"Even if the summer school be set up by the rushing brook, or in the shady forest nook, the strength derived therefrom does not compensate for the mental strain and waste of energy from the continued brain work. There may be many whose work for ten months does not strain their mental powers, and who may with profit attend the summer school;

but certainly the teacher should, especially in this land of nervous haste, set the example by remaining away from the summer school.

"He should seek rest and recreation which Nature offers at every step and turn, even in the vicinity of the great metropolis."

A noted physician of Brooklyn, Dr. Briggs, says: "The teacher should avoid the summer school and courses in pedagogy and psychology as he would the microbe of a pestilence. The favorite courses in psychology, etc., make him morbid, self-analytical. He should get out of himself and in close contact with Mother Nature, and Antæus-like renew his strength by the contact, for his wrestlings with his Herculean labors in the school room. He should play tennis, yacht, hunt, fish, botanize only in the open air, listen to the music of the waves or commune with Nature on the mountain-top. Above all, he should let his mind lie fallow, as the farmer does his field, firm in the belief that only in this way can he repair the waste of nervous tissue and the drain on his vitality caused by the mental strain of class-room work. The intellectual harvest of a summer spent in this way will be greater; he will thus gather a store of mental energy that will stand him in good stead during the long school term. He can then, without danger of nervous prostration, work in the coming term. He will thus renew the fires of his enthusiasm and will be able to enkindle in his pupils' minds a kindred spark by his illustrations drawn from the reminiscences of his own studies and musings at the shrine of Mother Nature."

This theory of the Doctor's is founded on years of experience. It is confirmed by the practice of the best teachers and principals of the city, who, like our superintendent, do not attend teachers' conventions or summer schools. They have found the strain, coming as it does at the end of a long term of protracted mental strain, is too great to compensate for the few advantages. Those who do go, while benefited by the contact with their professional brethren and the summer school course, come back to school in September worn out, and unfit for the work they are paid to do.

Take the summer schools I have attended. I found teachers struggling with courses and laboratory work often beyond their powers. Even when their previous college courses had enabled them to cope with the work they undertook, the hollow cheek, the fagged expression, their lassitude at the end of the course, showed that they had been straining their powers. Think of wrestling with the problems of psychology with the thermometer at ninety in the shade. Pursue the eye, measure the reaction time of the various individuals under such conditions, and your measurements and results are *nullified* and made practically valueless by the condition of both observer and the subject experimented upon. Nor is summer the time to listen to long lectures, in which the lecturer is forced, owing to the four, six, or ten weeks of the summer school, to condense a year's work in his department of investigation; nor is the teacher unable to do more, at best, than get a faint idea of what his professor is driving at or trying to elucidate. At best, the teacher is forced to say, "I will pursue this subject in a winter course." But he finds he has no time to do it in the winter, because he is exhausted by his class-room work, whereas if he had rested he would have been able to undertake it without undue strain.

But, you may say, the teacher may confine himself to one laboratory course and one lecture course and

spend the leisure time in making the acquaintance of his professors and fellow-students, while playing tennis, or picnicing, or at some other form of recreation. True, he may, but very few do. Like Josiah Allen at Saratoga Springs, when you get the first glass for a nickel and all you want to drink for nothing after its payment, the summer courses offer all the advantages for one price and very few teachers have the strength of mind to resist the temptation to drink more than is good for them, at the fount of knowledge, than, just as Samantha complains, Josiah Allen did at Hathorn spring.

Nor is this the only danger. There is another. In our large cities, they have opened vacation schools; the teachers are mostly drawn from the regular force of the city. Already I have heard the hard-headed member of the board speak about as follows: "Our teachers are paid by the year. Many do work all the long vacation at summer schools, and some in the vacation schools. If our teachers *will* work during the summer, why not ask them to work with their classes in manual work or school trips during vacation, such as are made in Germany? Our vacations are twice as long as those in German schools, and our teachers get twice as much pay for ten months' work. Why not shorten our vacation and let the teachers earn the munificent salaries we give them, and thus prevent the strain?" Who could blame the worthy member, when he has such numerous examples of earnest but misguided teachers, working as they do all the summer the board has provided for recreation?—*The School Journal.*

EDUCATIONAL DEVELOPMENT OF SWITZERLAND.

A SOMEWHAT special interest is attached to the new Foreign Office report on Switzerland, owing to the light it throws incidentally on the way the three questions with which our Government is now dealing have already been dealt with in that country. The Swiss, it is well to remember, have already found a solution for the religious education difficulty.

For years the teaching or non-teaching of religion in national institutions was the subject of fierce controversy in Switzerland; indeed, it was the attempt of the Jesuits to "capture" the schools in the Catholic cantons that led to the Sonderbund war in 1847. When peace was made, however, an arrangement was entered into which works, on the whole, quite satisfactorily. In purely Catholic districts the religious instruction is Catholic, and in the Protestant districts it is Protestant. But it is always given "on a fixed day and at stated hours, so that if parents wish their children to have nothing but a secular education they may absent themselves during that time." In some cantons where the population is composed of both Catholics and Protestants mixed schools exist; "but these schools cannot be called secular, for in a canton like Zurich, for instance, where Protestants are in the majority, a Roman Catholic child receives instruction in the elements of Christianity with readings from the Bible with his Protestant schoolfellows, until he is ten or eleven years old, when his special preparation for confirmation commences by the pastor of his faith. This system also

obtains in St. Gall, where the Roman Catholics almost double the Protestants in number." This is certainly a common-sense arrangement.

Primary education is compulsory throughout Switzerland, and no mercy is shown to people who attempt to keep their children away from school. In Solothurn parents are not even allowed the option of having their offspring educated at home or in private institutions. Considerable trouble is taken, however, to arrange the school hours with due regard to general convenience. In summer the classes begin at seven o'clock in the morning; thus, when the children have done working with their heads, they still have time enough to work with their hands. They have their holidays, too, in the autumn, so that they may be able during the harvest to help in the fields. Not only is primary education free, but in poor districts food and clothing are distributed at public expense among such of the children as need them.

In the opinion of experts, the Swiss schools are among the best, if they are not the very best, in Europe. And this is evidently the result not of a lavish expenditure of money, but of careful organization and good management; for the cost per head in the primary schools is only £2 a year, and the educational budget for the whole nation amounts to £1,500,160. Of this sum, £660,200 is paid by the State and £839,960 by the communes. The minimum salary of a teacher in a primary school is £48 a year, and in a secondary school £72. It is, however, of her technical schools that Switzerland has most reason to be proud, for they are perfect models of what such schools should be. The teaching given in them is both thoroughly good and practical. The pupils are not only shown how to do things, but are made to do them. This is especially the case in the "Ecoles menageres," where girls are taught housekeeping on the most economical principles; and in the Rubigen School, where domestic servants are in a five months' course of training—and at a cost of £4 12s.—rendered capable and deft. Then there are commercial schools, where boys are put in the way of becoming successful traders; watch-making schools; and, above all, agricultural schools of every sort and kind.

It is owing in a great measure to the existence of these schools that farmers are able to struggle more successfully in Switzerland than elsewhere against the present agricultural depression. These institutions are organized by the State in conjunction with the local authorities, for the Government holds strongly that the only effectual way of helping the agricultural classes to ward off the ruin that threatens them is by bringing technical teaching of the best kind within their reach, and thus enabling them to become experts in their calling. There even peasants who have only an acre or two of land to farm are regularly trained for their work, and are taught all the latest scientific devices for turning their soil to good account. Laboratories, experiment stations, and trial fields are maintained for their benefit; they are provided with professional advice gratis as to the best methods of managing their land, and are put in the way of obtaining manures, seeds, and labor-saving implements of the best quality at the lowest possible price. Infinite trouble is taken, too, in keeping them well informed as to which are the best markets for their produce, and helping them in every possible way; for both the State and the communal authorities are keenly alive to the fact that, whatever it may be elsewhere, in their country the prosperity of the whole nation is bound up with that of the farmers.—*Pall Mall Gazette.*

NOTES FOR TEACHERS.

CHANGES IN THE EARTH'S AXIS.—Of all the astronomical problems under discussion of late years, one of the most interesting has been that of changes in the earth's axis. It has been found that the imaginary line about which the earth rotates once a day is not invariably fixed with reference to the earth, but is continually changing its position in that body. The term "pole" has, therefore, to be taken in two different senses: First, as the end of the shortest diameter of the earth—this is a fixed point, with reference to the earth, as long as the earth keeps its shape, and may be called the "pole of figure;" second, the pole may be defined as the end of the diameter, about which the earth is revolving, and this pole may be called the "pole of rotation." It is found that the pole of rotation is continually shifting its position with reference to the pole of figure, along a curved line of considerable complexity. The distance between the poles is very small, never as much as 40 feet. Largely through the unwearied researches of Dr. S. C. Chandler the motion has been shown to be mainly composed of two parts. One part is the motion of the pole of rotation about the pole of figure in a circle of radius 12 feet, with a time of revolution of about 428 days. The second motion is of somewhat the same character, but with a period of one year, and the amplitude of this motion has varied during the last half-century from 4 to 20 feet. Some idea of the actual motion may be got by imagining a crank-arm 12 feet long attached to the pole of figure and revolving once in 428 days. To the moving end of this crank-arm is attached another which gradually changes in length and revolves once a year. The free end of this traces out the path of the pole of rotation. The actual path is apparently quite complicated. One of the principal effects of this shifting of the pole is that the latitudes of all places on the earth are continually changing. In fact, it was by this periodic variation in the latitude that the motion of the pole was detected. All parallels of latitude are continually shifting, with a range of motion of less than 40 feet from the mean position. There is little or no astronomical evidence of any progressive change in the position of the pole of rotation, by virtue of which it occupied a position greatly different from the present. Apparently the former existence of tropical plants and animals in what are now polar regions of the earth could be explained on such a hypothesis; but no one has yet been able to suggest a probable cause adequate to produce any great shift in the axis of rotation, and an explanation must be looked for elsewhere. The small periodic variations are the only ones about which we can be at all certain. —Malcolm McNeil, in the *Popular Science News*, New York.

MORAL QUESTIONING.—A young man had graduated from Yale College and had been appointed to teach in an academy in New York. He had been brought up in a village where profanity was not uncommon, and where the young man heard obscene stories. He had a class of young men and women to teach and became aware of his moral unfitness, though he possessed an adequate knowledge of facts. His conscience gave him perplexing questions to answer and he determined to leave teaching at the end of the year and study law. One day he was walking with a young man from his class and was perplexed to hear him say: "I am in a state of

doubt as to what I had better do. I did think of teaching, but I know I am not good enough. I have just joined the church in our village and now see that I was not fit to do that." The case was a trying one; he could not even suggest a means for solving the problem proposed, nor could he treat it lightly, for it was the very problem that perplexed him. He received the confession in silence. As he looked over his class and saw this young man and thought of his inability to offer him a helping hand, he felt sad. The principal of the academy noted his depression and said: "I hope you are a Christian." "No, sir; I am sorry to say I am not. It never occurred to me a month ago that I had anything to do with teaching morals or religion; but now I feel I am on a road with fellow mortals who have most serious thoughts, and I have nothing to say to them." After school that day the principal and his assistant walked away together; as they passed the village cemetery the former pointed out with his cane a comparatively new tombstone: "There lies a young man who was one of the brightest of our pupils. He was graduated from college with honor, but returned here to become a moral wreck. It has been a painful question with me whether this academy could not have prevented such a sad end as he made." The conversation led the assistant to seek the Kingdom of God: he is now himself the principal of an academy. —*Exchange*

FORGOTTEN STANDARDS. — Elizabeth Stuart Phelps in the reminiscences of her early life in Andover, published serially in *McClure's Magazine*, says many things of the standard of education in those days that are worth thinking about:

"We were taught that what Matthew Arnold calls 'conduct' was the deciding thing. Not that we heard much until we grew old enough to read for ourselves, about Matthew Arnold; but we did hear a great deal about plain behavior—unselfishness, integrity, honor, sweet temper—the simple good morals of childhood. The idea of character was at the basis of everything we did, or dreamed or learned."

"As one grew to think out life for one's self, one came to perceive a width and sanctity in the choice of work—whether rhetoric or art, theology or sculpture, hydraulics or manufacture—but to *work*, to work hard, to see work steadily, and see it whole, was the way to be reputable."

Of her father she says:

"His private character was one of rare tenderness and sweetness of heart. He would go out of his way to save a crawling thing from death or any sentient thing from pain. He took more trouble to give comfort or to prevent distress to every breathing creature that came within his reach, than any other person whom I have ever known. His sympathy was an extra sense, finer than eyesight, more exquisite than touch."

Why are these selections given here? Because they seem to hold a standard of education that it is well for teachers to consider at the beginning of the school year. A sane interval of thoughtfulness in our feverish method-madness may reveal to us that there is something else to be thought of in the training of children besides the manner of presentation of a school subject.

"Conduct the deciding thing—the simple good morals of childhood, unselfishness, integrity, honor, and sweet temper—hard work the way to be reputable—a sympathy for every breathing thing so fine, so exquisite, that it becomes an extra sense." These old-fashioned standards for the education of children may well make

us inquire how much we have gained upon them in our vaunted progress of the last half century. If they are still the recognized aims in our efforts for the children why do we hear so little about them? Why is our attention so easily caught and held by lesser things? Are we undertaking so much that we lose sight of the "greatest of these?"—*Primary Education.*

SON TO FATHER.

" O strong soul, by what shore
Tarriest thou now? for that force,
Surely, has not been left vain!
Somewhere, surely, afar,
In the sounding labour-house vast
Of being is practised that strength,
Zealous, beneficent, firm!
Yes, in some far-shining sphere,
Conscious or not of the past,
Still thou performest the word
Of the spirit in whom thou dost live—
Prompt, unwearied, as here!
Still thou upraisest with zeal
The humble good from the ground,
Sternly repressest the bad!
Still, like a trumpet, dost rouse
Those who with half-open eyes,
Tread the borderland dim
'Twixt vice and virtue; reviv'st,
Succourest!—This was thy work,
This was thy life upon earth."

—MATTHEW ARNOLD.

EDITORIAL NOTES.

By order of the Hon. the Minister of Education, four copies of THE CANADA EDUCATIONAL MONTHLY is to be sent to each Model School in Ontario for the months of October, November and December of the present year.

The convention of the Protestant teachers of the Province of Quebec, which was held on the 15th of October and the two days following in the city of Montreal, was one of the most successful gatherings of the kind that has been held in the Metropolitan City for some time. Estimated as an exposition of work accomplished along the lines of educational progress, it may be taken as a precursor of better things for Quebec in the near future, particularly in connection with elementary education. The progress which has been made in secondary education, and the marked improvements which have been inaugurated in connection with the superior schools have been duly recognized by the unanimous election of Dr. Harper as President of the Teachers' Association. His work as Inspector of Superior Schools, if the encomiums on his ability as an educationist are

to be taken as a criterion, has been crowned with success, and it has been not a little through his instrumentality and persistent advocacy that a movement has been inaugurated in favor of the Quebec elementary schools. This movement has been fairly launched, and in the platform there are three planks, as the politician on the other side of the line would say, the first being the provision for a better system of training for elementary teachers; the second, a provision for an increase in the grants; and the third a more direct system of supervision by the inspectors. Dr. Harper is convener of a committee on professional training; Mr. Parmelee has succeeded in getting the convention to pass unanimously a motion which may lead to the securing of the second; while Mr. Hewton, the retiring President of the Association, has thrown out a broad hint that the third is a necessity, by moving in favour of the appointment of an inspector general. With these three things secured, the persistent endeavors of the Montreal *Herald* in the direction of better schools for the country districts in Quebec are sure to be crowned with success. Should this happy issue of events be brought about, the whole Province will be benefited, while the man who thinks that since so much has been done in the past, further progress will not be hastened, will stand in a minority of one.

It is impossible for us to give a detailed account of the proceedings of this important meeting. Among the reports presented none was listened to with so much interest as the report from Mr. Truell, the representative of the Teachers on the Council of Public Instruction. That gentleman has intensified his popularity by the careful attention he has given to the interests of his fellow-teachers during his tenure of office, and it was no surprise to outsiders that they should give him a third term. It is said that none will be better pleased with this result than the Protestant Committee itself which has always been willing to listen to Mr. Truell's advice and act upon his suggestions. It is to be hoped that the first act of the committee at its next meeting will be to place Mr. Truell on the text-book sub-committee, where there seems to be work for others as well as for him, if the Council would save itself from being misunderstood by the public. Mr. Truell is also deeply interested in elementary education, and read an excellent paper on the subject, in which he pointed out in emphatic language the necessity for change, and to make his emphasis even more emphatic, Mr. McOuat read a second paper, while the President's masterly address was taken up for the most part with the same topic. There was no uncertain sound in Mr. Hewton's address. In it there was no mincing of matters, no pleading in favor of what had been done, but an unmistakable outcry for what ought to be done. What matters it who inaugurates, as long as the movement inaugurated is a right movement? The question of office-holding ought not to mix itself up or interfere with the rightful demands of the people. "The little red school-house on the plain" has to be improved, and this improvement has to be brought about in another way than by the mere framing of theoretical regulations. So thinks Mr. Hewton, and when he declared that the expenditure on primary education had decreased by $14,000 within the last thirty years, his audience was with him to a man in his further arguments.

Among the topics discussed at the convention may be mentioned, "Form and Color," by Miss Hicks, of Boston; "The Teaching of Botany," by Miss Carrie M. Derrick, M. A., of Montreal; and "Moral Training," by Dr. Har-

per. We may be able to give the papers on these subjects to our readers in future issues. On Saturday morning, the last day of the convention, there was a long continued discussion on the Pension Act, during which Inspector Lippens made explanations that led some to think that immediate steps had to be taken to prevent the fund from being reduced to a bankrupt condition. Dr. Robins took exception to some of Mr. Lippens' statements, and showed how he himself would be affected if Mr. Lippens' suggestions were to be carried out. The subsequent suggestions of the Pension Commissioners were accepted, and the convention proceeded to organize for the year 1896-7, with Dr. Harper in the chair. After the usual ceremonies in connection with the closing, a meeting of the Executive Committee was held, when the standing sub-committees were struck, of which we will give particulars in our December number.

SCHOOL WORK.

ENGLISH DEPARTMENT

QUESTIONS ON ENGLISH GRAMMAR.

PRINCIPAL STRANG, GODERICH.

FOR PUBLIC SCHOOL LEAVING CANDIDATES.

I have obeyed my uncle until *now*,
And I have sinned, for it was *all* through me
This evil came on William at the *feast*.
But, Mary, for the sake of him that's gone,
And for your sake, the woman *that* he chose,
And for this orphan I am come to you;
You know *there* has not been for these five years
So full a harvest; let me take the boy,
And I will set him in my uncle's eye.
Among the wheat; that when his heart is glad
Of the full harvest, he may see the boy,
And bless him for the sake of him that's gone.

1. Write out in full the subordinate clauses in the first three and the last three lines of the passage; classify each and give its relation.

2. Parse the italicized words.

3. Point out anything peculiar in regard to the relation of *woman*.

4. Is *am come* a passive verb? Give reasons for your answer.

5. Would *shall set* do equally well in line 9? Give your reasons.

6. Classify the preposition phrases in the first four lines according to their functional value, and give the relation of each.

7. Write sentences using the words *until*, *all*, *this*, *orphan*, *eye*, *set*, with a different grammatical value from what they have in the passage, and mention the value in each case.

8. Exemplify all the different uses of the nominative case.

9. Form all the derivatives you can from *obey*, *sin*, *take*, *know*, *heart* and *bless* respectively.

10. Correct any misused words or grammatical errors you see in the following sentences:

(*a*) We all know that the climate and soil of a country has a great effect on the character of the people.

(*b*) I could only find three boys in the class who knew how to work those sort of questions.

(*c*) Try and recollect where you saw it laying last.

(*d*) If the duty was taken of these things we would be obliged to close our factory.

(*e*) I don't know as there would be in any use in me trying to explain it to him.

CLASSICAL DEPARTMENT.

QUESTIONS BASED ON CÆSAR, BOOKS I-IO.

PRINCIPAL STRANG, GODERICH.

I.

Translate into good idiomatic English, Chapter 4, *Cum ab his—sumerent*.

1. Construction of *quid*, *Rhenum*, *solos*, *memoria*, *Gallia*.

2. Classify the subjunctives in the passage.

3. *Ortos*. What irregularities in the inflection of this verb?

4. Give the perfect infinitive and future participle active of *quareret*, *reperiebat*, *fieri*, *sumerent*.

5. *Ingredi*, *prohibuerint*. What other mood construction may follow verbs of *hindering*? Give an example.

II.

Translate idiomatically Chap 10, *Hostes ubi—non poterat*.

1. Parse *nostros*, *optimum*, *domum*, *quemque*.

2. *Reverti*. Mention any peculiarity in the inflection of this verb.

3. *Transeundo*. Is this a ground or a gerundive? How do you know?

4. *Finibus adpropinquase*. What other construction may follow this verb?

5. Exemplify from the passages three ways of forming nouns and adjectives respectively.

III.

Translate idiomatically.

1. Sopuli Romani exercitum hiemare atque inveterascere in Gallia moleste ferebant.

2. Ad hunc totius belli summa omnium voluntate delata erat.

3. Quae res at commeatus ab reliquis civitatibus sine periculo ad eum postari posset efficiebat.

4 Eorum adventu et Remis cum spe defensionis studium propugnandi accessit, et hostibus eadem de causa spes potiundi oppidi discessit.

5. Interim proclio equest tri inter duas acies conten debatur.

IV.

1. Exemplify different mood constructions following *dubito* and *persuadio*.

2. Distinguish in use *coepit* and *coeptus est*.

3. Distinguish *oppugus* and *expuguo cogo* and *convenio*.

4. Illustrate different meanings of *constituo* and *deficio*.

5. Give the nominative, genitive and gender of *pedum*, *moenibus*, *salute*, *latere*, *palus*, *liberos*.

V.

Translate into idiomatic Latin after Cæsar.

1. Such was the fear of all that not even the bravest could be persuaded to leave the camp in his absence.

2. We found on enquiring of the captives that the Reims, whose strength lay chiefly in cavalry, had sent 18,000 picked horsemen.

3. I am afraid he does not understand how important it is to the safety of our legions that the bridge should be broken down before the enemy reach the river.

4. The officer who was in charge of the fortification sent word to Cæsar that he could not hold out any longer unless reinforcements were sent him.

5 The arrival of these boats enabled us to cross the river sooner than any one expected.

6. To break up camp, to be informed by them, to learn what is going on among them, to set fire to all the dwellings they could reach, to be of great service in fortifying the camp.

EDUCATION DEPARTMENT.

ANNUAL EXAMINATIONS, 1896.

SCIENCE.

Editor.—J. B. TURNER, B.A.

THE HIGH SCHOOL AND UNIVERSITY EXAMINATIONS.

FORM III.

CHEMISTRY.

Examiners: R. R. BENSLEY, B.A.; C. A. CHANT, B.A.; A. MCGILL, B.A.

1. State *fully* what is meant by the following terms, and give examples in illustration of your statements:

(*a*) Chemical compound.
(*b*) Chemical change.
(*c*) Physical change.

2. (*a*) How would you prepare dry Oxygen?

(*b*) What weights of materials would you require to furnish 10 litres of the gas measured under normal conditions?

3. State in words, all the facts that are expressed by the following equation:—

$$Zn + 2HCl = ZnCl_2 + H_2$$

4. Make the following calculations:—

(*a*) The percentage composition of washing soda, from the formula, $Na_2CO_3, 10H_2O$.

(*b*) The formula of a substance which gives the following percentage numbers on analysis:—

Sodium........	18.55
Sulphur........	25.81
Oxygen........	19.35
Water..........	36.29

(Na = 23; S = 32; C = 12;)

5. Give a general sketch of the chemistry of Sulphur, under the following heads:

(*a*) Occurrence and properties.
(*b*) Compounds with Hydrogen.
(*c*) Compounds with Oxygen.

6. Ten litres of air is contained in a closed glass vessel at a temperature of 60° C. and a pressure of 700 mm. barometer. Make the following calculations:—

(*a*) The pressure on the sides of the vessel, if the temperature be raised to 100° C.

(*b*) The weight of air in vessel. (Density of air in terms of Hydrogen is 14.44.)

7. Describe experiments that may be done with Ammonia, and state the conclusions as to its *composition* and *properties* which are justified thereby.

The following are answers to the questions of the preceding paper:—

1. (*a*) A chemical compound is a substance whose molecule is composed of dissimilar atoms.

Water is an example of a chemical compound, because its molecule is composed of two atoms of hydrogen and one atom of oxygen.

(*b*) A chemical change is one in which the substances formed have properties different from those of the original substance.

The burning of wood is a chemical change, because the substances formed and the residual ash have properties different from those of the wood.

(*c*) A physical change is one in which the condition but not the composition of a substance is changed.

The boiling of water is a physical change because, while the substance is changed from a liquid to a gas, its composition is not changed; it is still composed of hydrogen and oxygen in the same proportions as in the liquid form.

2. (*a*) Dry oxygen may be prepared by heating together a quantity of manganese dioxide and potassic chlorate, and collecting the product over mercury. To ensure thorough dryness the gas should be passed

through tubes containing calcic chloride.

(*b*) The equation representing the decomposition is $KClO_3 = KCl + 3 \cdot O$.

Now, since 11.2 litres of oxygen under normal conditions weigh 16 grains, 10 litres weigh $16 \times \frac{100}{112}$ grams.

From the equation given above it is seen that 48 grams of oxygen are obtained from 122.6 grams potassic chlorate.

$\therefore$ $16 \times {}^{100}/_{112}$ grams are obtained from ${}^{122.6}/_{48.} \times {}^{16}/_{1} \times {}^{100}/_{112}$ grams of potassic chlorate.

3. The facts expressed in the equation are: (1) That hydrochloric acid acts on zinc yielding zinc chloride and hydrogen; (2) that two molecules of hydrochloric acid act on one atom (or molecule) of zinc, yielding one molecule of zinc chloride and one molecule of hydrogen; (3) that 65 parts by weight of zinc are acted upon by 73 parts by weight of hydrochloric acid, yielding 136 parts by weight of zinc chloride, and 2 parts by weight of hydrogen.

NOTE.—The consideration of the valency of the element is more than ought to be expected in answering this question.

4. (*a*) Three or four solutions of this question might be given, but here only the percentage of sodium, carbon, oxygen and water will be worked out.

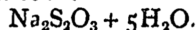
The molecular weight is 286, made up, 46 of sodium, 12 of carbon, 48 of oxygen and 180 of water.

$\therefore {}^{46}/_{286} \times {}^{100}/_{1}\% = 16.08$ sodium ${}^{48}/_{286} \times {}^{100}/\% = 16\ 76$ oxygen, ${}^{12}/_{286} \times {}^{100}/_{1}\% = 4.19$ carbon ${}^{480}/_{286} \times {}^{100}/\% 62.97$ water.

(*b*) Divide each percentage by the atom's weight in the case of the elements, and by the molecular weight in the case of the water as follows:

$18.55 \div 23 = .806.$
$25\ 81 \div 32 = .806.$
$19.35 \div 16 = 1\ 209.$
$36.29 \div 18 = 2.016.$

The nearest proportions to these expressed in whole numbers are 2, 2, 3 and 5. $\therefore$ the simplest formula for the substance is:



$$Na_2S_2O_3 + 5H_2O.$$

5. (*a*) Sulphur occurs in nature in combination with metals as sulphides and sulphates. Of the sulphides iron pyrites Fe S2, Galena PbS., cinnabar Hg S. and blende MS are the most commonly occurring ones, and barium, calcium and magnesium sulphates are the principal naturally occurring sulphates.

Sulphur is also found uncombined in volcanic regions, and this is the principal source of the sulphur of commerce.

Sulphur occurs in two crystallized forms, and also as non-crystalline or plastic sulphur. In one case the crystals are octahedral in the other they are monoclinic. The former are obtained by evaporating a carbon disulphide solution of sulphur. The latter are obtained from melted sulphur by cooling; this latter is not a permanent form, for when allowed to stand for a time the crystals become octahedral.

As already indicated, sulphur in the crystalline form is soluble, in carbon di-sulphide, but it is insoluble in water.

Sulphur at ordinary temperatures is a yellow solid, but as its temperature is increased it becomes darker in color.

At 115° C. it melts, forming a thin liquid; at a temperature of from 240° to 260° C. it becomes a viscid mass. and will not pour. Above this temperature it again becomes liquid and at 440° C. it boils and its vapor density is 96. The density gradually diminishes, until at about 850° C. it becomes constant at 32. Plastic sulphur is obtained by pouring liquid sulphur, just before it reaches the boiling point into cold water. This is a dark colored substance, insoluble in

carbon di-sulphide and somewhat elastic. If allowed to stand for a few hours it gradually becomes hard, changing into the crystalline form.

(*b*) There are two compounds of sulphur with hydrogen, their formulas being H_2S and H_2S_2. Only the first of this is of importance, the latter being very unstable, decomposing into H_2S and sulphur, and consequently difficult to prepare. Hydric sulphide H_2S is prepared by treating a metallic sulphide such as ferrous sulphide with sulphuric acid. The equation representing the preparation being $FeS + H_2SO_4 = FeSO_4 + H_2S$. H_2S is a gas, colorless, invisible, with a very offensive odor, somewhat soluble in water, density 17 ($H = 1$.) It is combustible in the air, the reaction resulting in the formation of water and sulphur dioxide if there is an excess of air, but if the supply of air is limited, the products are water, sulphur and probably some sulphur dioxide The gas is an acid, its hydrogen being replacable by a metal. It is much used in qualitative analysis.

(*c*) There are two compounds of sulphur with oxygen, sulphur dioxide and sulphur trioxide.

Sulphur dioxide is formed by the burning of sulphur, but in the laboratory it is prepared by heating together copper and strong sulphuric acid. Equations, $Cu + H_2SO_4 = CuSO_4 + 2H$. $2H + H_2SO_4 = 2H_2O + SO_2$

Combining these equations we have $Cu + 2H_2SO_4 = CuSO_4 + SO_4 + 2H_2O$.

SO_2 is a gas colorless, invisible, with a penetrating odor, soluble in water, with which it combines to form sulphurous acid; it is therefore an anhydride. Its density is 32 ($H=1$).

SO_2 is largely used as a bleaching agent, its action being that of a reducing agent.

Sulphur trioxide SO_3 is prepared by passing a mixture of sulphur dioxide and oxygen over finely divided platinum highly heated. It is a white solid with a strong affinity for water, with which it unites to form sulphuric acid.

6. (*a.*) The pressure on the sides of the vessel will vary directly as the absolute temperature.

$\therefore$ the pressure at 100° C. will be $700 \times {}^{373}/_{333} = 784.08$ m. m.

(*b.*) 10 litres of air 60° C. and 700 m m. becomes $10 \times {}^{273}/_{333} \times {}^{700}/_{760}$ litres under normal conditions.

11.2 litres of air, normal conditions, weigh 14 44 grams.

$\therefore$ $10 \times {}^{273}/_{333} \times {}^{700}/_{760}$ litres weigh.

$10 \times {}^{273}/_{333} \times {}^{700}/_{760} \times {}^{1444}/_{1120} = 9.73$ grams.

7. The solubility of ammonia may be shown by filling a Florence flask with the gas and inverting the flask over a vessel of water.

The basic character of ammonia is shown by passing the gas into a solution of red litmus.

That ammonia will burn when mixed with oxygen may be demonstrated by putting some ammonia hydrate in a test tube, passing a current of oxygen into the hydrate, and igniting the mixture as it issues from the tube. Heating the test-tube slightly will ensure the success of the experiment.

If some ammonia gas, say 20cc be put in an eudiometer over mercury, and a series of electric sparks be passed through the eudiometer the gas will gradually decompose, the resultant gases occupying 40cc. Now, if a quantity of oxygen be passed into the eudiometer and then an electric spark passed through the mixture of gases, an explosion occurs and it will be found that a small quantity of water is formed, therefore there must have been some hydrogen in the mixture, and if the residual oxygen that is in the eudiometer is removed the remaining gas will be found to be nitrogen. As a result of the explosion there is a decrease in volume of 45cc

in the gases in the eudiometer; ⅔ of this is due to the hydrogen that was liberated from the ammonia, i.e., 30cc out of the 40cc were hydrogen, therefore the remaining 10cc must be nitrogen. From this experiment it will be seen that ammonia gas consists of nitrogen and hydrogen in the proportions by volume of one of nitrogen to three of hydrogen.

CONTEMPORARY LITERATURE.

By order of the Hon. the Minister of Education, four copies of THE CANADA EDUCATIONAL MONTHLY is sent to each Model School in Ontario for the months of October November, and December of the present year.

The conclusion of "Sir George Tressady," is what one naturally turns to first in the October *Century*. There can be no doubt that it is powerful, but it need not have been a tragedy. The tragic element should shadow forth the tragic ending from the first page. Dr. S. Weir Mitchell is to occupy the place of the main serial by his romance "Hugh Wynn, Free Quaker," in the coming year. Those who remember his great psychological study, "Characteristics," will welcome this announcement with pleasure.

There is a strong human element in the November number of the *Atlantic Monthly*. Colonel T. W. Higginson begins an entertaining reminiscence of his Boston boyhood entitled "Cheerful Yesterdays," and Jacob A. Riis, who long since found the nearest way to the heart of to-day, tells us something more of our little brothers and sisters. The title of his contribution is, "Out of the Book of Humanity." "The Juggler," a new story of the mountain country, by Charles Egbert Craddock, is begun; while Mrs. Riggs is most successful in "Marm Lisa," achieving even a stronger climax than she has before attained in her work, excellent as it has been.

With the beginning of the new magazine year *Littell's Living Age* is to add a supplement to its pages. This is to contain three departments; readings from American magazines, readings from new books, and a list of the books of the month.

"Sentimental Tommy," the boyhood of one of the most remarkable children of fiction, has come to an end. No one can help regretting this, a regret which is tempered with the conviction that this cannot be the last we shall hear of him, though continuations are perilous things. The October *Scribner's* (Tommy came to a conclusion in November) contained a short story by H. C. Bunner in a manner very unusual to that lamented author; the scene depicted is one both intense and terrible.

Paderewski's "Menuet Moderne" appears in the October number of the *Ladies' Home Journal*. It is a most delicate and poetic work and will give pleasure to thousands of those for whom it was written. Lilian Bell tells us how men fail as lovers in as gentle a way as she can convey the information; there is, of course, another side to the question.

George Meredith recently contributed to the *National Review* an appreciative essay on Mrs. Meynell's two books of essays—"The Rhythm of Life," and "The Color of Life." This article may be read in *Littell's Living Age* for Sept. 19.

First, Second and Third Readers in the Educational Music Course,

Ginn & Co., Boston. Four of the best known of the teachers of music in the United States have been associated together in preparing this series of musical readers, while the words joined with the various songs have been the special care of Nathan Haskell Dole, who is known as the author of pleasing verse. A special feature of the course is that from the beginning all exercises are given in rhythm.

"Thus Spake Zarathustra," by Freidrich Nietzsche, translated by Alexander Tille. Macmillan & Co., London; The Copp, Clark Co., Toronto.

An admirable translation of a remarkable prose poem, the greatest work of this modern German writer. Although it is the strangest product of modern German literature the form is not so singular as might at first appear to one unacquainted with much of the work which has recently been produced in Germany. Its title, "Zarathustra," is a variation of the name, more familiar to English readers under the form of "Zoroaster," and the book itself is an exposition of an ideal of what Nietzsche considered a man should be. Whatever the intellectual assent or dissent of the reader with the doctrine of the book may be, still it would be impossible to devote any serious attention to the problems presented by the author without thereby becoming more enlightened and broadened in thought and judgment.

"A Cathedral Pilgrimage," by Julia C. R. Dorr. New York: The Macmillan Co.; Toronto: The Copp, Clark Co. Either to those who have been across the sea, or for those who hope to go there, this pleasant little book on a journey through the most attractive parts of England, will prove a good friend in a quiet hour. It is not ambitious, neither is its existence in the world very necessary, but it awakens a longing for the beautiful, and a stronger determination to choose only the most worthy when the day of choice comes.

"The Education of Children at Rome," by George Clarke. New York: Macmillan Co.; Toronto: The Copp, Clark Co. This interesting little book was first prepared as a dissertation for the degree of Doctor of Philosophy in the University of Colorado. It is divided into eight chapters, on such subjects as the Child's *Earliest Training, the Secondary* Schools, and the Status of Teachers. Canadians might learn with benefit that the first consideration with Roman parents in selecting school for their children, was the moral character of the teacher.

"The Scenery of Switzerland, and the Causes to which it is Due," by Sir John Lubbock. London: Macmillan & Co.; Toronto: The Copp, Clark Co. A lucid and popular account of the geology of the Alps, intended by the author to be of service more especially to those who are tourists in Switzerland, and who seek to find out something as to their surroundings. *Diagrams of the various formations* and maps of the different localities will be found in the book.

"Melincourt," by Thomas Love Peacock. London: Macmillan & Co.; Toronto: The Copp, Clark Co. This is one of the latest issues of Macmillan's standard novels, and the usual introduction which has appeared in each of these series is in this case written by George Saintsbury. In it he admirably characterizes the position and trend of the book, which is a satirical novel of the old school, abounding in more or less exaggerated pictures of the great men of the author's time, such as Wordsworth, Coleridge and Southey. Mention should be made of Mr. Townsend's highly successful illustrations, which alone would make the book worth possessing.