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# Educational Weekly

VOL. V.

THURSDAY, FEBRUARY 24TH, 1887.

Number 110.

## The Educational Weekly.

Edited by T. ARNOLD HAULTAIN, M.A.

**TERMS:** Two dollars per annum. Clubs of three, \$5.00. Clubs of five at \$1.60 each, or the five for \$8.00. Clubs of twenty at \$1.50 each, or the twenty for \$30.00.

PUBLISHED BY

THE GRIP PRINTING AND PUBLISHING CO.,  
TORONTO, CANADA.

JAMES V. WRIGHT, General Manager.

TORONTO, FEBRUARY 24, 1887.

THE *Educational Times* says that "the friends of education have much reason for rejoicing in the fact a large number of the memorials which are to render Her Majesty's Jubilee memorable will take an educational form. Technical schools, colleges, and endowments of professorships will be, in many cases, the visible signs by which contemporary English loyalty will be evidenced to unborn generations."

THE objection to co-education lies, not in schoolroom association, for that is as helpful in its way as home association, but in the line of work. The amount and kind of study demanded of the average young lady differs, in the minds of some, in quality, quantity, and direction, from the disciplinary studies expected from boys of the same age. The high school for girls is, perhaps, so unlike the high school for boys as to justify the belief of those, among whom was the late Dr. Philbrick, who would maintain separate establishments."—*Colorado School Journal*.

THE superintendent of schools, for the State of New York, says that between three and four thousand public school teachers drop out every year, and that the great majority of the vacancies thus created are filled by the appointment of persons who have little or no experience, and have no intention of teaching permanently. This annual falling off is not peculiar to New York. There is, we

suppose, just as large a falling off in proportion in this Province. The evil is a great one. Two remedies seem to suggest themselves, which it will take time and enlightened public opinion to carry out: Pay teachers of skill and experience a living salary; let teachers honour their calling, and strive by every means in their power to elevate it. Then teaching will be a profession worth remaining in.—*New Brunswick Journal of Education*.

THERE is no such place under heaven as a home for a training school in every strength and every virtue. The best public school system that can be found is acknowledged a poor substitute. Home is a moral gymnasium, where every fibre of a child's being gets its due use and proportionate growth. In the land where homes are perfected, it is of small consequence what public schools are. But, went on Mr. Warren, although America may have as perfect homes as can be found in the world, it has a great many of the other kind; and, unfortunately, all the children are not found in the first. It is on account of the second class that America is in danger; and it is to supply the defects of this second class to the generation now coming up, and to endeavour that the following shall receive the training in that home to which school is an excellent supplement but a poor substitute, that the energies, not only of educators, but of all patriots, should be turned.—*Education*.

IN a long letter to the *Scotsman*, Professor Blackie writes as follows.—So far from helping English, the classical teaching often ignores it altogether. My well beloved brethren, the classical scholars, if they mean to maintain their ground either in lean Scotland or in fat Oxford, even within the limited range to which the progress of things will confine them, must make up their mind seriously to make a radical reform in their method of teaching the languages. Languages, whether dead or living, must

be taught as an art, not a science; must be learned as we learn fencing or cricket, dancing or music, by practice in the first place. The teacher must begin by thinking and speaking in the language which he pretends to teach, and not by subjecting the learner to a dull, grey book, bristling with grammatical formulas. Frequent repetition by the living practice of brain and ear and tongue, working harmoniously together, is the norm of Nature in this domain, which schoolmasters and professors may not ignore with impunity. Taught according to the living method of nature, I will guarantee to give an apt youth more living familiarity with the Greek language in five months than he may now acquire under the despotism of dead grammars in as many years.

ATTENTION, one of the most important elements of success in educational work, was the special subject of Principal Bodington's opening lecture to the members of the Teachers' Training Classes, delivered in the Chemistry Lecture Theatre of the Yorkshire College, Leeds, recently. Professor Bodington said that the teacher, besides having to deal with the mental, moral, and physical progress of his pupils, had as his special province the development of the intellect, in which the main factor was the cultivation of attention. As soon as a pupil learned to attend, his mental progress began, and to a grown man the key to that progress was often the power of attention. Some even thought that genius depended more upon the possession of the power of attention than anything else, Buffon having defined genius as "a long attention." It had been well said that all change, contrast, and transition of mind acted as a sort of arousing shock. There was probably no characteristic which more easily distinguished those who had the teaching gift than the selection of means to sustain the attention. While there must be variety in the stimuli provided, too frequent change of stimulus was equally fatiguing with monotony. Children should be treated as individuals, not machines.

## Contemporary Thought.

THE chief requisites for beginners in journalism may be summed up thus:—

1. A good English education. Learn first to write English; I mean plain, straight, quick Saxon, sturdy and lithe as a sapling. Let your Latin and Greek adornments come in afterwards. Study the history of the world, of the United States and Great Britain and Ireland; and study everything else that you conveniently can. Drill yourself in writing swift, sharp, vivid yet graceful accounts of everything that comes under your notice, putting it picturesquely but never at the cost of clearness and brevity. Colleges do not teach this art.

2. Common sense.

3. Good judgment of the relative importance of subjects.

4. Obedience, patience, punctuality.

5. In spite of attaining to all these virtues, do not be a prig. However much knowledge your brain may hold, never do or say anything which will lead the wise to charge you with being touched by the malady known as "big head." Conceit, the wise it call.

That there may be exceptions to these rules is true enough. There are good journalists who are not well educated, patient, or in any way humble. But I am speaking of the ideal journalist; and it will not do for the novice to model upon the exceptions.—*Geo. Parsons Lathrop, in the Chau-tauquan.*

In a recent number of a religious periodical there occurred the following sentence:—"There can be no question as to the abstract proposition that land is not a proper subject for private ownership; that labour alone creates wealth, and labour does not create land."

It is obvious from the appearance of a statement like this in a publication of high standing that many worthy people are half ready to accept Mr. Henry George's theory of a common ownership in land. They are not ready, perhaps, to sanction his scheme of ruthless confiscation, but they are saying to themselves that at bottom his theory is right, and they are wondering whether land cannot ultimately be restored to the community, to which, it is said, it rightfully belongs. My purpose, therefore, in reply to the proposition so confidently affirmed by the writer I have quoted, is to make good the following points:—

1. That land, no less than other things, is a proper subject for private ownership.

2. That labour alone does not create wealth.

3. That labour creates the conditions that make land wealth just as much as it creates the conditions that make other things wealth.

And, in continuance of the subject, I hope to how—

4. That the greater part of the land is now practically held by the community, for it enjoys in common all that the land produces.

5. That the confiscation of the rental value of land by means of taxation would in the main be a confiscation of the proceeds of labour.

6. That unearned increment in land, of which much is said, is no more hurtful to the community than other forms of unearned increment.

7. That the accomplishment of Mr. George's purpose would be destructive to the best interests of the community.—*From "Some Points in the Land Question," by Oliver B. Bunce, in Popular Science Monthly.*

SIR PHILIP SIDNEY possessed all the personal advantages which make a primrose path of life. His delicate beauty, almost feminine in character, was in itself a passport in an age which set an extravagant value on good looks, and preferred that they should not be too massive. But this maidenly aspect, in Sydney as in Milton, belied a very vigorous and manly temper, as Pyraeas was concealed under the garb of Zelmane. Nor did Sidney ever allow himself to be browbeaten on account of the bloom of his complexion. When he was only two-and-twenty, Elizabeth sent him as ambassador to Don John of Austria, who received him with condescension, as being somewhat startled that the Queen of England should send such a boy to Philip II.'s generalissimo. But Sidney contrived to show him his mistake, and soon after we find him not knowing what tribute to pay to this "extraordinary planet," and proving his appreciation of Sidney by treating him with more honour and respect than any of the Ambassadors of other States. It was the same everywhere. There is no doubt at all that he was marvellously fitted to fill the most precarious posts in the world of diplomacy. And it is noticeable that where cool judgment was needed, while Raleigh always failed, Sidney always succeeded. It does not seem that he took any interest in politics. His prognostics of events in his letters are as incorrect as they could possibly be. His strength lay in personal intercourse with men who held the reins of power. He knew how to please them and secure their confidence, and even when they were the enemies of England he did not seem able to help leaving them Sidney's friends. It was not like Elizabeth's usual cleverness to distract the possessor of this extraordinary gift to other fields. The man who had more tact than all the rest of her Court should have been restrained, against his own preference, from becoming a soldier.—*Contemporary Review.*

In Rome, under the empire, wealth at one pole was a symptom of misery at the other, because Rome was not an industrial state. Its income came from plunder. The wealth had a source independent of the production of the society of Rome. That part of the booty which some got, others could not have. No such thing is true of an industrial society. The wealth of the commercial cities of Italy and Southern Germany, in the middle ages, was largely in the hands of merchant-princes. If one were told that some of these merchants were very rich, he would have no ground of inference that others in those cities must have been poor. The rich were those who developed the opportunities of commerce which were, in the first instance, open to all. What they gained came out of nothing which anybody else ever had or would have had. The fact that there are wealthy men in England, France, and the United States to-day, is no evidence that there must be poor men here. The riches of the rich are perfectly consistent with a high condition of wealth of all, down to the last. In fact, the

aggregations of wealth, both while being made and after realization, develop and sustain the prosperity of all. The forward movement of a strong population, with abundance of land and highly developed command by machinery over the forces of Nature, must produce a state of society in which average and minimum comfort are high, while special aggregations may be enormous, misfortune and vice being left out of account. Whatever nexus there is between wealth at one pole and poverty at the other can be found only by turning the proposition into its converse—misery at one pole makes wealth at the other. If the mass at one pole should, through any form of industrial vice, fall into misery, they would offer to the few wise an opportunity to become rich by taking advantage of them. They would offer a large supply of labour at low wages, a high demand for capital at high rates of interest, and a fierce demand for land at high rent.—*From "What makes the Rich richer and the Poor poorer," by Professor W. G. Sumner, in Popular Science Monthly.*

THE report of the Royal Commission on the depression of trade and industry in Great Britain is by no means as discouraging a document as many expected it to be. The investigation made by the Commissioners was thorough, and it seems to have been impartial. They have found out that during the twelve years of depression which has been so generally lamented and which has excited so many fears neither the volume of trade nor the amount of capital invested therein has materially fallen off, though the latter has in many cases depreciated in value. Many will be surprised to learn that during the whole of this period of depression year by year the accumulation of capital has been proceeding at a more rapid rate than the increase of population, and that there are indications which show that the country has been, in spite of every drawback, advancing in material prosperity in other directions. In proof of this the Commissioners refer to the statistics of pauperism, education, crime, savings banks, etc. There has been a falling off in foreign trade, but this has been more apparent than real, for the shrinkage in values show a less amount of money for a given volume of trade. For instance, the aggregate foreign trade for 1883, if valued at the prices of ten years previously, would have amounted to £861,000,000 instead of £667,000,000. There has been no diminution during the period of depression of the aggregate of commodities produced by British capital and labour. There has been one exception to this state of British industries. The agricultural interests of the country have suffered greatly during the hard times. The products of the soil have materially decreased in quantity, and the prices received for them have fallen off greatly. "The steady fall in prices," say the Commissioners, "has of course affected the agriculturist even more seriously than the diminished yield of the soil." Sir James Caird estimates the loss of the purchasing power of the classes engaged in or connected with agriculture at £42,800,000 during the year 1885, and the loss in several of the preceding years must no doubt have been equal or even greater than this. This immense loss continuing so long has doubtless had the effect of deepening the depression in Great Britain.—*Montreal Star.*

## Notes and Comments.

"EDUCATION" thinks blackboards and slates are doomed, that the day is coming when teachers and children will write on walls and desk tablets of lustreless white with soft, dustless pencils. These are now being introduced into the German schools. Dr. Cohn, the great German oculist, recommends those tablets made in Pilsen as lacking entirely a lustre which is trying to the eye.

MR. RUDOLPH DE GUEHERY, teacher, Pettewawa, will, at the close of the term this year, celebrate his twenty-fifth year of teaching in the Province of Ontario. Mr. de Guehery is a painstaking and able teacher and we hope that he has still before him many years of useful work in the profession.—*Pembroke Observer*. Mr. R. de Guehery is re-engaged for a fifth year with increase of salary.

THE desire of the W. C. T. Union of Ontario is that:—

1st. Scientific temperance instruction be made compulsory in all classes in our Public schools.

2nd. A graded series of text books on the subject, be placed in the hands of the scholars.

3rd. Instruction be given regularly in this study as in other studies of the course, and similar examinations required of the pupils. The books recommended by the Ontario Union are:—"The Barnes Series" (graded), consisting of *The Child's Health Primer* (in Canada), 35 cents; *Hygiene for Young People*, 55 cents; *Steel's Hygienic Physiology*, \$1.

"THE triumphs of lady students over their male competitors at Queen's and Toronto Universities are becoming old stories, and now McGill, the last to admit women to the privileges of higher education, is the scene of successes still more conspicuous. There the ladies have captured in the recent Christmas examinations first place in every subject save two in the three years of the course. When they reach the fourth and final stage of the curriculum they may confidently be expected to carry off most of the honours. Who said that the mental power of Canadian girls lagged behind their splendid physique? In eighteen class examinations upon as many subjects in the three different years the girls stood first at McGill in sixteen."—*Ottawa Evening Journal*.

EDUCATORS on both sides of the Atlantic are crying out against the system that compels students to direct their work toward the getting of a high per cent. at a competitive examination. The publication of examination lists by the colleges and schools of this city [Winnipeg] would seem to indicate a different opinion among the members of the craft here. When our young people are led

to exert themselves to properly perform their school duties in order that their names may be given to an admiring public at the end of each week, they are hardly being educated in that becoming modesty that "does good by stealth," nor are they being taught the scriptural principle which enjoins that the good deeds of the right hand be concealed from the left.—*The Manitoban*.

IN a school section in Northumberland County, where a young lady is engaged as teacher, there has been quite a dispute as to whether it would be prudent to re-engage her or not. It was claimed that she had too many admirers of the opposite sex, and that the section had thus been deprived of a portion of her time that should have been spent in the discharge of her duties as a teacher. Accordingly at the school meeting the trustees had an agreement drawn up to the effect that she should not keep company during the coming year with any young men during school hours, as her undivided time should be devoted to the school. Upon her refusing to sign this agreement it was decided to leave it to a vote of the meeting as to whether she should be compelled to sign it or not. A show of hands was taken, and it resulted in a tie, when the chairman, being a young man, gave the casting vote in her favour. So says the *Trenton Courier*.

INSPECTOR CARSON, of W. Middlesex, has issued the following circular to the teachers of his inspectorate:—The teachers during this year, will please give increased attention to reading, writing, drawing, singing, and calisthenic or drill. Many teachers, are of opinion that six songs, each requiring a different air, should be taught each half-year. Kindly consider this matter and come prepared to discuss it when the teachers meet on the 28th and 29th of April, in the town of Strathroy. The Department of Education requires every teacher to read carefully for next meeting, "Hopkins' Outline Study of Man" and "Fitch's Lectures on Teaching," as the Director of Institutions will ask questions based on these texts. Get to work at once, we want to do well in the examinations. A gold medal will be given to the candidate who makes the highest marks at the next Strathroy Entrance. The winner of this medal must be under 15 years, and a pupil attending this half-year one of the public schools of West Middlesex.

A CORRESPONDENT of the *Journal des Débats* gives some account of the great advance which higher education in Greece has made of recent years. There are 33 "gymnasias" in the kingdom, 200 secondary schools, and 1,717 primary schools. These are all public. Among the private educational establishments, the first place must be given to the "Society for the Higher Education of Women," in connection with which a *lycée* for girls was established a few

years ago, with a staff of 76 teachers and 1,476 pupils. Greeks send their girls there from all parts of the East. Education is very liberally endowed in Greece; and the sums which Greeks settled in foreign countries send home for this purpose are very large. One result, of course, is that the Greeks are almost entirely in possession of the learned professions in Turkey. Illiteracy, too, is rare in the kingdom; in the most out-of-the-way hill countries you will see little scholars (says the correspondent from whom we are quoting) reading their Piatarch's "Lives."

THE *American Teacher* makes the following most sensible remarks:—Every teacher of experience knows the value of the good will of his pupils, but many fail in securing the confidence and love of children; not because they do not desire to do so, but from the lack of knowledge of the true way to accomplish their purpose. The secret of success and power in acquiring an abiding hold of the minds and hearts of children lies in the ability we possess to enter heartily into their feelings, to understand their childish hopes and fears and their joys and sorrows. The teacher who would acquire an ascendancy over the young must sympathize with their ideas, their fancies, and even their caprices, in all cases where he can do so and not come in conflict with principle and duty. Teachers must study constantly child nature, child activity, child thought, and child feeling, if they would form a bond of union between themselves and their pupils. Such sympathy must be sincere and genuine; unless it is so they cannot bring themselves close to the children's hearts nor enter into their world.

THE Corporal Punishment in Board Schools question (says the *St. James's Gazette*) has been temporarily settled. The assistant teachers are not to be allowed to "whack" the boys and girls, which, perhaps, is just as well, seeing that they are often mere boys and girls themselves. But the Board still allows head teachers the right to exercise this very necessary and salutary discipline. It has adopted a resolution of Mrs. Westlake's which points out to the teachers that the good schoolmaster is he who contrives to spare the rod without spoiling the child. It would be more useful if, instead of this piece of abstract and disputable doctrine, the Board had laid down precise rules as to the mode in which corporal punishment should be inflicted. The use of the rod—or, better, the birch—should be limited to "that portion of the body which can receive any reasonable infliction without danger of ill consequences," as the *Times* euphemistically puts it. Blows on the head are perilous and cruel in the highest degree, and caning on the hand is not a practice for which there is much to be said.

## Literature and Science.

### MUDIE'S LIBRARY.

THE whole arrangements for carrying on the work of the library are admirable. They are divided into three heads of departments—Country, Book Society, and Town. The two former are supplied by rail or carriage; in the latter subscribers exchange personally. Most people living in London at a distance from Mudie's join the Book Society branch, when their books are exchanged for them once a week by a cart, which calls before their doors, they sending a list a few hours beforehand to the library to say what they want. The exchange hall is a handsome dome, lined with books. Here ply the busy assistants who furnish customers, and the rapidity with which they do this is amazing. In a few minutes the desired book is in your hands, speaking eloquently for the order and system that pervade the whole concern.

It would seem the number of books issued and reissued during the week exceeds a hundred thousand. Each subscriber has a card devoted to him, on which are entered the books he has read. These, when full, are put away into an iron safe, where, doubtless, no one ever disturbs them. An interesting record they will prove some day of a nation's reading.

Subscriptions vary from £1 1s. to £500. The latter sum is chiefly paid by public institutions, which draw their supplies from Mudie's; but many families take large subscriptions for themselves and their servants. An idea of the amount of reading that may be had for £200 a year is shown by one public office in London, that takes for this some 20,000 volumes. About 1,000 boxes and parcels per week are sent to country and colonial subscribers in India, Australia, and the Cape, and the packing and expediting of these is no trifle. Each box is arranged to hold from ten to one hundred books.

Whether it is well or ill for literature that one firm should absorb so much of the "circulating library" business in the kingdom; whether it is well or ill for literature that these librarians, who must be governed to some extent by commercial considerations, should decide on what shall or shall not be read by thousands of persons; whether public, author, and publisher lose or gain by the system—is a very open question. Only one thing is quite certain; thousands of men and women are supplied with books by Mudie, and authors must count with him. Some readers, it is said, devour for their annual guinea works to the value of £200 to £500. Therefore, whether for good or evil, Mudie is a power in the land.—*Leisure Hour.*

### THE SUN'S HEAT.

A BRILLIANT audience filled the theatre of the Royal Institution last night (Jan. 21st) while Prof. Sir William Thompson expounded the latest dynamical theories regarding the "probable origin, total amount, and possible duration of the sun's heat." During the short 3 000 years or more of which man possesses historic records there was, the learned physicist showed, no trace of variation in solar energy; and there was no distinct evidence of it even, though the earth as a whole, from being nearer the sun, received in January  $6\frac{1}{2}$  per cent. more heat than in July.

But in the millions of year which geology carried us back, it might safely be said there must have been great changes. How had the solar fires been maintained during those ages? The scientific answer to this question was the theory of Helmholtz, that the sun was a vast globe gradually cooling, but as it cooled shrinking, and that the shrinkage—which was the effect of gravity upon its mass—kept up its temperature. The total of the sun's heat was equal to that which would be required to keep up 476,000 millions of millions of millions horse power, or about 78,000 horse power for every square meter—a little more than a square yard—and yet the modern dynamical theory of heat shows that the sun's mass would require to fall in our contract thirty-five metres per annum to keep up that tremendous energy. At this rate the solar radius in 2,000 years' time would be about one-hundredth per cent. less than at present.

A time would come when the temperature would fall, and it was thus inconceivable that the sun would continue to emit heat sufficient to sustain existing life on the globe for more than 10,000,000 years. Applying the same principles retrospectively, they could not suppose that the sun had existed for more than twenty million years—no matter what might have been its origin—whether it came into existence from the clash of words pre-existing, or of diffused nebulous matter. There was a great clinging by geologists and biologists to vastly longer periods, but the physicist, treating it as a dynamic question with calculable elements, could come to no other conclusion materially different from what he had stated.

Sir William Thompson declined to discuss any chemical source of heat, which, whatever its effect when primeval elements first came into contact, was absolutely insignificant compared with the effects of gravity after globes like the sun and earth had been formed. In all these speculations they were in the end driven to the ultimate elements of matter—to the question—when they thought what became of all the sun's heat—

what is the luminiferous ether that fills space, and to that most wonderful form of force upon which Faraday spent so much of the thought of his later years, gravity.—*Daily Telegraph (London, Eng.).*

QUEEN VICTORIA'S reign has been marked by great progress in the health and longevity of British subjects. In a recent address to the Society of Arts, Capt. Douglas Galton drew a striking picture of the filthy, overcrowded, immoral, half starved and diseased state of the people of fifty years ago, and outlined the measures which have been taken for their betterment. Registration of disease, the first step in scientific sanitary investigation, was inaugurated in 1837, just eleven days after the Queen's accession, but health reforms gained slowly until the cholera epidemic of 1848, when hygienic advance really commenced. The result, while less than it should have been, is a splendid one. In England and Wales the death rate from 1838-42 was 22.07 per 1,000; from 1880-84 it was 19.62 per 1,000, and the deaths from zymotic diseases, which averaged 4.52 per 1,000 in 1841-50, were reduced to 2.71 per 1,000 in 1880-84. In the decade of 1850-60 the average annual saving of lives in England and Wales from sanitary improvements was 7,789; in 1860-70 it rose to 10,481; in 1870-80 to 48,443; and in the five years 1880-84 the annual saving had reached 102,240 lives.

THE remarkable villages built on piles in pre-historic times were not confined to the lakes of Switzerland. Similar lake cities are traced in Italy, Austria, Hungary, Pomerania, France and Savoy, but they are generally smaller, and nearly all belong to the age of polished stone, instead of extending through several periods. In Switzerland over two hundred of the villages are known, forty being in the lake of Neuchatel. Each contained about three hundred huts, and some of them must have had a population of twelve or fourteen hundred. Scientific guesses have placed the age of some of the lake cities at no less than seven thousand years, while others are probably not three thousand years old. Lake dwellers have not been unknown in historical times. Herodotus describes a people who lived in a platform city over Lake Prasias in Thrace, and in the present day dwellings on piles over water are built in many parts of the world, including New Guinea, Borneo, Celebes, and even Russia.

THE beaver is reported by Prof. Collett, the Norwegian zoologist, to have become extinct in northern Norway, about 100 only being still alive in the south.

Special Papers.

A NEW PHONOTYPY.

THE second subject on the "Programme of Studies in the Public Schools" (Fourth Class) is Systematic Orthoëpy. It is certainly time that Systematic Orthoëpy was systematically taught in our schools, and it is unfortunate that the Education Department has not authorized some system of diacritical marks, so that the subject might be uniformly taught. There are forty sounds in the English language—sixteen vowels and twenty-four consonants. Hence the English alphabet is both defective and redundant—defective in having only twenty-six letters for forty sounds, and redundant inasmuch as there are different letters having the same sound. As these forty sounds have to be represented by twenty-six letters, some of the letters have to do duty for several sounds. This is generally accomplished by having types specially cast with certain marks, called diacritical marks, over or under them; as ā, ã, ä, etc. This is expensive, and few printing offices have these peculiar types. As there are about thirty-five of these marked letters it is no small matter to master any system of diacritical marking. Spelling the pronunciation; as, what (hwot), phlox (flocks), is always unsatisfactory for three reasons—it is uncertain, it takes time and space, the pupils are as apt to remember the spelling of the pronunciation as of the word itself. Permit me through your columns to offer my fellow-teachers a system of indicating the sounds—simple, brief, systematic, and practical. I have christened it "Johnson's Phonotypy," have used it a long time, and now publish it, hoping that others may profit by it. It possesses the following advantages over any other system:—

- (1) It is inexpensive; all printing offices have the necessary material.
- (2) It is brief; there are only fourteen signs instead of nearly forty in other systems,
- (3) The look of the letters is not changed to the pupil's eye; the ordinary letters are used.
- (4) No matter what the spelling is, the same sign has always the same sound. It has also disadvantages.

RULE.—In print, place the sign *after* the vowel or diphthong; in manuscript, over or under it.

The vowels:—

fa,te	fa't	faur	fa'll
me;te	me't		
pi:ne	pi:-n		
co:ne	co'n		
mu,te	nu't	rufle	pu'll
now	out	(unmarked)	
boy	oil	(unmarked)	

These are the sixteen vowel sounds of the English Language. Though they are represented by more than one hundred different spellings in English words, they can be ac-

curately indicated by the foregoing fourteen signs; as,

fa,te	—fa,y, the,y, wei,gh, brea,k, fe,te.
fa't	—ma't, ba'de, the're, pai'r, pray'er, whe're.
me;te	—hea;t, ravi;ne, fee;t, tear, pi;que, mie;n.
me't	—le;d, hea;d, bu'ry. s:d, say's, again, the'n.
pi:ne	—ty;pe, si;gh, die:, dye:, ly:re, ri:pe.
pi:-n	—thi:-n, bu:-sy, pre:-tty, hy:-mn, li:-mb, li:-ly.
co:ne	—moa:n, mo:w,n, thro:ne, beau:, co:coa, doo:r.
co'n	—o'n, wha't, wa's. Jo'n, sho'ne, Go'd, wa'n.
mu,te	—new:, lie,u:, beau,ty, you:, ewe:, due:.
nu't	—su'n, so'n, si'r, he'r, my'rrh, hu'rl, whi'rl.
fa'll	—ca'llm, au'nt, tau'nt, vaui'nt, Ottawa'll, ailh.
fa'll	—law'z, a'll, no'r, bou'gh, tau'ght, lo'rd.
rufle	—hoof't, true't, mo'tve, lo'tse, drew't, foot'd.
pu'll	—foot, pu'sh, wo'lf, wo'tman, goot'd, fu'll.

RULE.—In print, place the sign *after* the consonant and italicize the silent consonants.

The consonants. Only a few of these require to be marked.

s	like z—tho;se, addi:, busy, ho;se.
x	like gz—ex'act, ex'amine, ex'haust.
g	like j—g'aol, g'em, g'ing'er.
g	hard—g'live, g'old, g'ill.
c	like s—sa;ide (the usual letter, or a figure 5 inverted.)
th	as in this—throu'gh.
n	like ng—sin'k, fi'nger, an'chor.
s	like sh—ju'gar, s'jure.

The vowel sounds are frequently modified by contiguous consonants. The sound of u in mute is never found after r. The other vowels coming before r are drawn out. Thus the sound of a in am and a in pare is the same in *quality* but not the same in *quantity*. In the latter word the r causes the sound to be prolonged somewhat, as if you were to pronounce pat pa'a't. A similar lengthening happens to o in cost, gone, etc.

Let us apply the system to the pronunciation of a few words commonly mispronounced:—

ba'de,	not ba,de,	we're,	not we're nor we,rc.
with,	not with,	pa're,	not pa,rc.
new:,	not new't.	mo:me'nt,	not mo:-me'nt.
co'st,	not co'st.	lo'ng,	not lo'ng.
wa's,	not wa's.	Tue,s-day,	not Tue'ts-day.
fro'm,	not fro'm.	du:-ty,	not du'ty nor j,u-ty.

G. W. JOHNSON,  
Head Master Central School, Hamilton.

AN English paper says Councillor W. J. Lancas'er, of Colmore Row, London, has a very remarkable photographic apparatus, to be used for detective purposes or ordinary portrait photography. The apparatus is inclosed in a watch case, which opens in the ordinary manner by means of a spring. As the case opens a miniature camera shoots out for a moment, shuts up again, and the thing is done. A detective who wishes to secure the portrait of a suspected character will only have to get close to his subject, and pretend to pull out his watch and look at the time, and the features will be registered. We may mention that for the sake of experiment, accurate and "speaking" likenesses were taken of a large number of the persons who mixed in the crowd at the recent Socialists' meeting.

Educational Opinion.

THE LOWER TEN.

Two English teachers were in conversation, and, of course, they were talking of their experiences in school. One was an old man, who, besides having served as mathematical master at Eton for thirty years, had been for another long period master of a great school at Windsor. The other was a much younger man, though at the head of an important institution.

The younger man said, "I shall not live to be as old as you are. The boys will kill me before I reach your age."

The old man replied, "It is the boys who keep me alive."

One of these teachers enjoyed what worried and exhausted the other, and any one who remembers his school-life can give a pretty good guess at the reason. In a school of a hundred boys, at least ninety are usually so well disposed that they give little wearing trouble to a faithful and intelligent teacher. The distress and exhaustion are caused by the remaining ten, some of whom are stupid, others careless, others merely nervous and restless, and, perhaps, two or three really depraved.

The art of governing a school consists chiefly in knowing what to do with the lower ten, and it is just that part of the art which is least capable of being communicated. Every boy is a new case, requiring special study and peculiar treatment. Yet it is the ninety good boys who can most readily influence the others. Not long ago four or five of the lower ten were engaged in the mean sport of making fun of a poor old woman who lost her mind many years ago by the sudden loss of her children. She was a harmless, good creature, who went about chattering words without meaning, and these thoughtless, cruel boys were pulling her dress and laughing at her.

One of the upper ninety came along. He did nothing violent, nor did he indulge in indignant speech. He merely said, "Fellows, it is mean to treat this old woman so." That was all, and it was enough. They desisted, and the poor woman went her way in peace.

When the ninety act in that manner throughout, the ten will not kill their teachers, and they themselves will probably escape hanging. The worst boy dare not face the public opinion of his school, if it is expressed so that he knows what it is.—*Ex.*

SCIENCE IN RELIGIOUS EDUCATION.

I CORDIALLY invite the clergy to become scientists. If existing religious organizations are to be preserved, the scientific method must be unqualifiedly adopted and prosecuted in the study and teaching of religion



By this method, ecclesiasticism may be transformed, and organized religion saved. Without it, deterioration will go on till the ruin is complete. If the present system of organized Christianity perish, however, the men who are responsible for its destruction will be those officially in charge of its interests; who might have saved it if they would, but were not wise in time; who would not believe in the power of social forces; who refused to perceive the necessity of adaptation, the certainty and the beneficence of change; who had not faith in the God of their worship, as he works in and through Nature; and who would not allow their own minds to awake from their deau selves and rise to "nobler verities."

To conclude, now, these remarks upon religious education, let me sum up what I conceive to be the scientific position. Religious truth should be taught in schools and seminaries of learning as far as it is a matter of scientific knowledge, but critically and not with the purpose of promoting any religion. The utmost care should be taken to present arguments for and against any statement of fact, or any inference, judicially and without the arts of persuasion. Doubt and inquiry should be favoured and stimulated, not discouraged or repressed. If this can be accomplished, it is desirable to have religion, as something to be studied in its relations to truth, to character and conduct, taught in public and other schools. But if this method cannot be followed, then, until there is unanimity of opinion as to what is true in religion, all teaching on the subject must be excluded from the public schools. In other institutions effort should be made to introduce and develop the scientific, the critical, the comparative method in this sort of instruction, while every encouragement should be given also to the establishment of schools, colleges, and universities, where its adoption and consistent practice shall be insured.—*Daniel Greenleaf Thompson, in Popular Science Monthly.*

TEACHERS AND SCHOLARS.—Is it advisable for a teacher to go out to play with the scholars?—L. A. S. We answer yes. If he is a true teacher, successful in his work, and possessing the confidence and respect of his pupils, a little run with his pupils will not diminish that respect one atom. A principal of a large school lost none of his dignity as teacher by going out at noon-time and entering heartily into a game of baseball. Other teachers have skated and snow-balled with their scholars. They have helped them build stores, and have set them up in business. Rainy days they have not only directed games but have entered into them. It is a false idea of dignity that keeps a teacher sleepily watching a stirring game and will not allow him to take part. A little vigorous exercise at noon would send the blood tingling through his veins, and refresh him for the afternoon work.—*The Teachers' Institute.*

## Mathematics.

### ALGEBRA.

1. Shew that  $(a+b+c)^2 - (b+c)^2 - (c+a)^2 - (a+b)^2 + a^2 + b^2 + c^2 = 6abc$ .

2. If  $xy+yz+zx = 1$ , shew that

$$\frac{x}{1-x^2} + \frac{y}{1-y^2} + \frac{z}{1-z^2} = \frac{4xyz}{(1-x^2)(1-y^2)(1-z^2)}$$

3. If  $a$  and  $B$  are the roots of the quadratic  $ax^2+bx+c=0$ , form the quadratic whose roots are  $(a+B)^2$  and  $(a-B)^2$ .

4. What is the distinction between an equation and an identity?

To which class, having regard to  $x$ , does the following belong:

$$(x + \frac{5a}{2})(x - \frac{3a}{2}) + ax = (x+5a)(x-3a) + 11\frac{1}{2}?$$

5. Solve:

$$\frac{ax+m+1}{ax+m-1} + \frac{ax+n}{ax+n-2} = \frac{ax+m}{ax+m-2} + \frac{ax+n+1}{ax+n-1}$$

6. If  $Q$  be the remainder in dividing  $a^{10} + 13a^{27} - 16a^{15} + 8a^9 - 12$  by  $a+1$ , and if  $Q'$  be the remainder in dividing  $x^{10} - 27x^{27} + 40x^{15} - 23x^9 + 16$ , by  $x-1$ , find the value of  $Q-Q'$ .

7. If  $9x^4 - 30x^2y + Qx^2y^2 - 10xy^3 + y^4$  is a perfect square, find the value of  $Q$ .

8. Reduce to its lowest terms:

$$\frac{8x^7 - 377x^3 + 21}{21x^7 - 377x^4 + 8}$$

9. If  $\frac{a}{x}(b-c) + \frac{b}{y}(c-a) + \frac{c}{z}(a-b) = 0$ ; show

$$\text{that } \frac{x}{a}(z-y) + \frac{y}{b}(x-z) + \frac{z}{c}(y-x) = 0.$$

10. Solve  $4x^2 + 24x - 4(4x^2 + 24x - 153)^{\frac{1}{2}} = 213$ .

11. If  $xyz = 1$ , then  $(1+x+y)^{-1} +$

$$(1+z+x)^{-1} + (1+y+z)^{-1} = 1.$$

J.H.T.

### ALGEBRA SOLUTIONS.

(See page 871.)

1.  $(1-y^2)(1-z^2) = 1 - y^2 - z^2 + y^2z^2 = (x+yz)^2$  by substitution

$$\therefore \{(1-y^2)(1-z^2)\}^{\frac{1}{2}} = x+yz; \{(1-z^2)(1-x^2)\}^{\frac{1}{2}} = y+xz,$$

$$\{(1-x^2)(1-y^2)\}^{\frac{1}{2}} = z+xy, \therefore z+xy+x+yz+y+xz =$$

$$z(1+x) + x(1+y) + y(1+z).$$

2. (a) Let  $a+b=x$ ,  $b+c=y$ , and  $c+a=z$ .

Then  $8(a+b+c)^3$  will equal  $(x+y+z)^3$ .

$$\text{Exp.} = 8(x+y+z)^3 - (x^3+y^3+z^3) = 3(x+y)(y+z)(z+x).$$

$$3(a+2b+c)(a+b+2c)(2a+b+c).$$

$$(b) 9x^3 + 48x^2 + 52x + 16 = 9x^3 + 36x^2 + 12x^2 + 48x + 4x + 16 =$$

$$9x^2(x+4) + 12x(x+4) + 4(x+4) = (9x^2 + 12x + 4)(x+4) =$$

$$(3x+2)(3x+2)(x+4).$$

$$3. a^3 + b^3 + c^3 - 3abc = (a+b+c)(a^2 + b^2 + c^2 - ab - ac - bc)$$

$$a(a+2b) + b(b+2c) + c(c+2a) - (a+b+c)^2$$

$$\therefore \text{H.C.F. is } a+b+c.$$

$$4. \text{Denominator of fraction} = s. \quad 4m^2x^2 - (a^2 - m^2 - x^2)^2 =$$

$$(a-x+m)(a+x-m)(a+x+m)(x+m-a)$$

$$\therefore \text{Fraction} =$$

$$\frac{a+m}{(a+x-m)(m+x-a)}$$

5. Let  $a=0$ , expression vanishes,  $\therefore a$  is a factor, and by symmetry  $b$  and  $c$  are factors.

Let  $a=1$ ,  $b=2$ ,  $c=3$ , and numerical factor is 1.

$$\therefore \text{expression} = abc.$$

6. Let  $a^2 + b^2 + c^2 = x$ ,  $ab + bc + ac = y$ , then expression =

$$z^3 + 2y^3 - 3xyz = (x-y)^2(x+2y) = (a^2 + b^2 + c^2 - ab - bc - ac)^2$$

$$(a^2 + b^2 + c^2 + 2ab + 2ac + 2bc) = (a^2 + b^2 + c^2 - ab - bc - ac)(a+b+c)^2 = (a^3 + b^3 + c^3 - 3abc)^2 \text{ by substituting values of } x \text{ and } y$$

7. Raising both sides to the  $(2m)$ th power,

$$(a+x)^2 = x^2 + 8ax + b^2,$$

$$a^2 + 2ax = 8ax + b^2,$$

$$6ax = a^2 - b^2,$$

$$\therefore x = \frac{a^2 - b^2}{6a}.$$

J.H.T.

(To be continued.)

### A PROBLEM BY S. ROBERTS, M.A.

GIVEN two circles  $C_1, C_2$ , show that the centres of circles which (1) are orthogonal to  $C_1$  and are bisected by  $C_2$ , or which (2) are orthogonal to  $C_2$  and are bisected by  $C_1$ , lie on one and the same circle whose centre is at the mid-point between the centres of the given circles, and which is coaxial with them; also (3) the circle orthogonal to three given circles, the circle which bisects them, and the circle through their centres are coaxial.

*Solution by the Proposer.*

Let  $s, t$ , be the radii of  $C_1, C_2$ , and let a circle  $C_1$  whose radius is  $r$  fulfil the conditions (1). Then denoting by  $p_1, p_2$ , the distance between the centres of  $C$  and  $C_1$ , and that between the centres of  $C$  and  $C_2$ , we have  $p_1^2 = r^2 + s^2, p_2^2 = -r^2 + t^2$ , or  $p_1^2 + p_2^2 = s^2 + t^2$ . Now, if the centre of  $C$  is considered as variable, this represents a circle which is coaxial with  $C_1, C_2$ , and has its centre at the middle point between the centres of  $C_1, C_2$ . We may evidently interchange  $s$  and  $t$  without affecting the result.—*From the Educational Times.*

## Methods and Illustrations

### STORIES FOR REPRODUCTION.

THE teacher should read a story once, having the full attention of the class. Pupils should be given a limited time to do their work in, and promptly at the expiration of it he should collect the written exercises. These first efforts will be, doubtless, crude, but the teacher should be vigilant in seeing that the rules regarding the use of capital letters, the period, verbs—as do, set, get, bring, ate, etc.—are always observed. The exercises having been returned, all mistakes should be corrected, the work in the amended form being shown to the teacher.

The following short stories are given as suitable for reproduction:—

1. A young robin once fell to the ground near a turkey and her brood. The turkey, thinking it meant to harm her little ones, flew at it in great rage. The robins in the orchard hearing the cries of distress, darted down at the turkey, screaming and picking her savagely. But she only grew angrier, and tossed and pitched the poor little robin harder and harder, until a lady hearing the uproar, came and drove the turkey away.

2. At sunset the herdsman on the highest summit of the Alps takes up his horn and calls out, "Praise God the Lord!" From all over the mountain-side and the valley below come back the responses, "Praise God the Lord!" This lasts sometimes a quarter of an hour, then follows a solemn stillness as each shepherd, on bended knee and with uncovered head, offers up his evening prayer. After a few minutes the first horn sounds out, "Good night." "Good night," echo all the others, and silence settles down over the mountain-side.

3. One Christmas eve a cold, hungry robin flew into an old church in England just before the sexton closed the door. He filled his little empty crop with red holly berries, perched on a bunch of evergreen, tucked his head under his wing and went to sleep. The next day, as the children finished singing a grand carol, the clear, joyous song of a bird rang out from the branches above. It was the robin singing a happy Christmas carol from his thankful little heart.

4. A little New Foundland puppy lived in a kennel and was fed three times a day from an earthen dish. One noon his dinner did not come. After waiting an hour he began to bark and howl, but nobody came; so picking up his plate, he carried it to his mistress and held it up before her with a most pleading look in his little brown eyes. Of course such a request could not be refused, and he was rewarded by a bountiful dinner.

5. A New Foundland dog and a Scotch terrier were great friends. One day the latter fell from a wharf into the bay, where

there was nothing for him to climb out upon. The New Foundland happening to come along soon afterward, quickly sprang into the water, seized the drowning dog and swam toward an embankment a hundred yards away. Here he landed the almost lifeless dog, waited for him to recover his strength, and then both trotted joyfully homeward.

6. One day a large black ant and a small red one had a battle. They hugged and bit each other fiercely. The red one gnawed a black feeler, while the black one pulled off a red leg. Another red ant coming along, thought that his brother, being much the smaller, needed help; so he sprang on the black ant's back and commenced chewing his neck. Soon the black head tumbled off and the two red brothers went home to bind up their bruises.

7. A shepherd once left his dog to watch a part of his sheep while he drove the others to a fair. While there he forgot about the flock at home and did not return until the third day. He at once inquired about the dog. No one had seen him. "Then," said he, "I know that he is dead, for he is too faithful to desert his charge." He hurried to the fold and found his dog just able to crawl. With a look of joy it crouched at his feet and almost immediately died.

8. A farmer, many years ago, dug and weeded and enriched his garden so well that his turnips and onions were twice as large as those of his neighbours, and he had five bushels where they had but one. This made them angry and they took him before the judge and accused him of getting help from the witches.

"Your Honour," said he, "go with me to my garden, watch me weed and water and hoe, and you will see all the charms I use."

The judge praised him for his industry and let him go free.

9. A certain lawyer always made very long speeches. One day a friend said, "Now, to-morrow, I will lift my finger when you have talked long enough."

The next day, while in the very midst of his speech, the lawyer saw his friend lift his finger. He was surprised and confused and had to stop. "Why did you lift your finger so soon?" he asked.

"I didn't!" exclaimed his friend; "I was only brushing a fly off my nose."

(To be continued.)

### TEACHING WRITING.

#### 1. POSITION.

A CORRECT position in writing should be strictly enforced by the teacher. The penholder is placed between the thumb and first and second finger; the point of the pen about one inch from the second finger. The holder crosses this finger at the root of the nail, the upper part of the holder must not be

below the upper joint of the index finger. The thumb must not be straight, nor should it touch the first finger. The third and fourth fingers must be curved naturally under the palm of the hand, being perfectly free from stiffness, with the ends resting lightly on the paper. The wrist is to be held in a horizontal position, so that, were a small silver coin placed on the top of it, it would remain there, while the pupil was writing. The arm rests on the fleshy part below the elbow. Teachers must see that the pupil does not raise the arm from the desk, nor yet should it slide to and fro on the muscle; the right arm being free from the side of the body and resting lightly on the table. Do not allow the body to throw any weight on the arm.

Next we come to the position of the body. The pupil should sit upright, with the body about two inches from the desk, the head inclined slightly forward, the left arm resting on the table and holding the paper in the correct position. Teachers should see that the paper or copy book is placed square in front of the student, and not in the oblique direction.

The following should be carefully noted:—

1st. Position of penholder.

2nd. Arm should rest on the muscle.

3rd. Pupil should not lean over on the desk.

4th. See that the wrist is in correct position.

J. W. ELLIOTT.

### EXERCISES IN ENGLISH.

COMBINE the elements in each number, so as to form a single sentence:—

1. The water-worn stone made his axe and tomahawk. It was found at the beach. It had been patiently ground to an edge.

2. The sun is reflected in the ocean. The sun is reflected in the water-drop. In both, strange beings are called into life. These beings are very much varied in size and form.

3. We admire myriads of creatures. These inhabit the depths of the ocean. Their size ranges from the monstrous whale to the tiniest specimen of the finny tribe.

4. There were two other boats. They were too small to hold the whole number of men. An attempt was made to construct a raft. The beating of the waves rendered this impossible. The men already in the pinnacle were directed to lie down in the bottom. They were ordered to pack themselves like herrings in a barrel. The lesser boats returned through the surf. They went to pick the men off the cliff.

5. The chronometer was the special charge of the captain's clerk. He had been directed always to hold it. He was to hold it in his hand when the guns were fired. He was to

(Continued on page 922.)



TORONTO:

THURSDAY, FEBRUARY 24, 1887.

**ACCURACY IN EXPRESSION.**

ANYONE accustomed to read or even to glance through the columns of Canadian or United States newspapers must surely have been over and over again struck with the lamentable ignorance displayed on the subject of the meanings of words—often simple and common words, words used in every-day conversation. It is a sign of neglected education. The thoroughly educated man rarely, if ever, mis-uses a word. If he is ignorant of a particular word's signification, he will avoid its use. But the press of this continent teems with words wrongly employed.

The evil may of itself appear to some trivial. But in reality it is not so. It is a symptom of an evil that is by no means trivial, a symptom of a wide-spread ignorance existing amongst those who aspire to lead and to express popular opinion. The press is in very truth one of the great educators of the community; and it is a most deplorable fact that so many of the writers of the press—particularly of the provincial press—are sadly wanting in the elements of a sound English education. We refer not here so much to errors of grammar, to infelicities of expression, to poverty of vocabulary, although all these abound. What we wish to point out is that the meanings of common words are not understood by those who aspire to educate the people.

We speak of the excellence of our system of education, but if a foreigner were to judge of this vaunted system of ours by the columns of the average country newspaper he would in all probability be inclined to question its excellence, for the press of a country may be taken as giving a clue to the degree of education which the people of that country enjoy.

We think teachers should do something to counteract this bad influence. We teach composition and spelling, we set stories for reproduction, etc., and of course the meanings of words are well learned by these means. But it would by no means be out of place to devote an hour or two each week to this one subject of learning accurately the meanings of words.

As a sample of a lesson of this kind we append the following examination paper

which might be set on a Friday afternoon for pupils of the higher classes of high schools or collegiate institutes:—

Distinguish between:—

1. Healthy, healthful, wholesome.
2. Pace, rate, speed, velocity.
3. Balance, remainder, remnant.
4. Rent, lease, let, hire.

Write short sentences illustrating the various meanings of each of the following words:—

<i>Virtue,</i>	<i>letter,</i>
<i>fond,</i>	<i>liberal,</i>
<i>secure,</i>	<i>net,</i>
<i>obnoxious,</i>	<i>fold,</i>
<i>project,</i>	<i>loose,</i>
<i>prevent,</i>	<i>instant,</i>
<i>present,</i>	<i>invalid,</i>
<i>fancy,</i>	<i>jade,</i>
<i>race,</i>	<i>jail,</i>
<i>record,</i>	<i>impress,</i>
<i>rush,</i>	<i>hurt,</i>
<i>rude,</i>	<i>humour,</i>
<i>rise,</i>	<i>grave,</i>
<i>note,</i>	<i>form,</i>
<i>master,</i>	<i>force,</i>
<i>manifest,</i>	<i>contract,</i>
<i>match,</i>	<i>course,</i>
<i>lowering,</i>	<i>drift,</i>
<i>last,</i>	<i>digest,</i>
<i>leave,</i>	<i>distinguished,</i>
<i>let,</i>	<i>sink.</i>

Distinguish *oval* and *ovoid*.

Write sentences introducing the words *victuals*, *diet*, *food*.

Write sentences introducing the words *discord*, *discordant*, and *disagreement*.

Mention some words derived from the Greek *pyr*, fire.

Give some of the meanings of the word *folio*.

Criticise:—

"Do not blame it on me."

"He is waiting on the Minister of Public Works."

"We are waiting on the opening of the door."

"Reward awaits the good."

Write sentences introducing the word *blame* both as a substantive and as a verb.

Can you find any fault in the following?

"He left there Saturday and came Monday."

Questions such as these will arouse the interest of the pupils, especially if the teacher himself manifests an interest in the subject. They will also form a good exercise in the use of the dictionary—a book which few children know how properly to make use of.

**OUR EXCHANGES.**

THE *Critic* for February 12th is a remarkably good number.

NEAL DOW has prepared an article for the March number of the *Forum*, defending both the theory and practice of Prohibition, and insisting that in Maine prohibitory legislation is effective.

**REVIEWS AND NOTICES OF BOOKS.**

THE title of Mr. T. W. Higginson's forthcoming booklet has been changed to "Hint's on Writing and Speech-Making."

MR. JUSTIN H. MCCARTHY has nearly completed a book on "Ireland since the Union; Sketches of Irish History from 1800 to 1886."

DR. BENJAMIN F. LOSSING has completed his popular history of the State of New York; the work will probably be published at an early date.

A NEW series of "Great Writers" has been started by a British publisher, the first brief biography in which is one of Longfellow by Eric S. Robertson.

BROWNING'S "Stratford" has been produced at the Strand Theatre, London, under the auspices of the Browning Society. The presentation seems to have suffered in the acting.

THE famous "Alice in Wonderland" not only has a new companion, "Alice's Adventures Under Ground," but has been dramatized and produced at the Prince of Wales's Theatre, London.

MACMILLAN & Co. announce a popular edition of the "English Men of Letters Series," in monthly shilling volumes. This step will help to displace the "shilling dreadful" by the "shilling grateful."

THE *Academy* has a highly appreciative article on the first volume of Dean Plumptre's great work on "The Commedia and Caucuziere of Dante," which comprises a life of the poet and essays on his works.

THERE is to be still another edition of the "Pickwick Papers," which is to be issued on the anniversary day of the Queen's accession, by Chapman & Hall, and to contain fac-similes of the original drawings.

OWING to the very large call for "Minto's Manual of English Prose Literature" Ginn & Co. have decided to print it themselves, instead of importing sheets. This will enable them to reduce the price from \$2.00 to \$1.50.

MORE than 12,000 copies have been sold of the three popular translations of Plato:—"Socrates," "A Day in Athens with Socrates," and "Talks with Socrates About Life," published by Charles Scribner's Sons. The books are now to be brought out in English editions.

A NEW volume by Ernest Renan, entitled "Studies in Religious History," is about being published in England, and will be imported here by Scribner & Welford. It contains chapters on Francis of Assisi, Religious Art, Spinoza, Port Royal, a word upon Galileo's Trial, etc.

*Recreation* is the title of a new weekly illustrated journal devoted to out-door life and sports, which succeeds the *Cyclist and Athlete*, *Tennis and Archery News*. The editorial and publication office is at 755 Broad street, Newark, N.Y.; the New York office, under the management of C. L. Meyers, is at 125 Chambers street,

We learn from the *Athenæum* that Mr. William Morris has finished the twelfth book of his translation from the "Odyssey," and that the twelve books have gone to press; that Mr. Spencer's health is somewhat improved; and that Professor Mahaffy's "Rambles and Studies in Greece," now out of print, are shortly to appear in a third edition.

F. WARNE & CO., New York, will shortly publish a new and thoroughly revised edition of "Nuttall's Standard Dictionary." The work is edited by the Rev. James Wood, of Edinburgh, who has been engaged upon it for nearly three years; it will be an etymological as well as a pronouncing dictionary, containing numerous illustrations.

MISS CHARLOTTE M. YONGE has contributed to the growing literature of the Queen's jubilee, a little volume sold at a shilling, and written for the purpose of providing the public with a readable *résumé* of the last fifty years of English history. The book is entitled "The Victorian Half-Century," and is to contain as a frontispiece a new portrait of the Queen engraved by Lacour.

MR. F. S. ELLIS writes to the *Athenæum* that very considerable progress has been made with the projected concordance-lexicon to Shelley's poetry during the seven months that it has been actually in hand. More than one-half of the 32,026 lines of which Shelly's poetical works consist is indexed and revised. The work is being done by volunteers, and allotments are made to any who can give two or three hours a day to it.

ANOTHER series of the "Best Plays of the Old Dramatists" is shortly to be published in England. Mr. J. A. Symonds will furnish a general introduction to the first volume, which will deal with the Elizabethan drama. Each volume will contain on an average five complete plays. Mr. Gosse is put down for Shirley, Mr. Swinburne for Middleton, Mr. Symonds for Webster, Mr. Strachey for Beaumont and Fletcher. Ben. Jonson, Dryden, Congreve are to follow.

PROF. WILLIAM JAMES, of Harvard College, will occupy the first place in *The Popular Science Monthly* for February with an unusually readable paper on "The Laws of Habit." A very clear explanation, on physiological grounds, of the way in which habits come to involve all the functions of the organism, growing with its growth, and hardening into permanency as it matures, makes this article invaluable reading for youth and for those who have the care of the young.

THE following articles on educational topics appeared in the chief American magazines in December and January:—*Atlantic* (Dec.), "Object of a University," by Elisha Mulford. *Forum* (Dec.), "How I was Educated," by E. J. Robinson; "How I Was Educated," by Jas. B. Angell. *North American Review* (Dec.), "Educational Methods," by George Sand. *Popular Science* (Dec.), "New Requisitions for Admission at Harvard College," by Josian P. Cooke; (Jan.), "Manual Instruction," by Sir John Lubbock.

ON April 15th, the twenty-second anniversary of President Lincoln's death, Walt Whitman is announced to deliver his lecture on Lincoln before a New York audience, and at a later date, to give it in Boston. One who is in a position to know

how the poet's financial affairs stand, says that they are in a distressing state, and that Whitman's return to the lecture platform is prompted solely by his great need of funds. As this Lincoln lecture netted him on a certain occasion in Philadelphia last year nearly \$700, there is no immediate cause for concern among his friends.

D. O. HAYNES & CO., Detroit, Mich., will publish shortly a "Thesaurus of Botanical Synonyms," compiled by Dr. A. B. Lyons and D. O. Haynes. This book will give for each drug (1) The correct botanical name according to the latest and best scientific authority. (2) Etymology and pronunciation of generic names. (3) Natural order of the plant. (4) Its habitat. (5) Correct English Name. (6) Synonyms, English, French, German and Latin. (7) Pharmacopœial names, according to U.S., British, Homœopathic, French, and German Pharmacopœias, explaining the part of plant to which these names apply. (8) Properties and uses. (9) Doses. The work will be as complete as possible, particularly in respect to indigenous plants and drugs of recent introduction.

MRS. SANDHORN TENNEY has done excellent service to young folks by preparing a series, in six neat little volumes, of "Pictures and Stories of Animals" (Lee & Sheppard). First we have quadrupeds, then birds, fishes and reptiles, bees, butterflies and other insects, sea shells and river shells, and sea-urchins, star fishes and corals. Thus the whole range of animate nature is surveyed, and in a most pleasing and attractive way. For Mrs. Tenney does not forget her audience. She has a knack, which very few of the so-called writers for the young have, of expressing ideas in really simple language. Books on natural history, for children, are abundant; of stories about animals there is, perhaps, a superfluity; yet among them all one would have to search for a long while to find anything so admirably adapted to the needs of children, as is this series. Each volume is complete in itself, and profusely illustrated.

THE *New York Evening Telegram* says of Mr. J. Addington Symonds's "Sir Philip Sidney":—"A brief biography of a great and good man by a scholarly and entertaining writer. In his preface Mr. Symonds thus sets forth his purpose in the writing of this little book:—"In composing this sketch I have freely availed myself of all that has been published about Sidney. It has been my object to present the ascertained facts of his brief life, and my own opinions regarding his character and literary works, in as succinct a form as I found possible." The book takes the reader back to the delightful days of Good Queen Bess, and many interesting extracts are made from the works of the authors of the period illustrating facts in Sidney's life. Mr. Symonds says of him:—"The man was greater than his words and actions. His whole life was a true poem, a composition, a pattern of the best and honourablest things." A large part of the sketch is devoted to a consideration of Sidney's literary work which will be found very interesting."

THE editor of *The Forum* reads his public like a book, and if any part of the public does not read *The Forum*, it is probably only that part for which fifty cents a month raises an insurmountable barrier. Religion and social science are prominent in the January number, as they usually are—the former

represented by M. J. Savage, on "The Religion of a Rationalist." Dr. J. M. Buckley, on "The Morality of Ministers" (both striking articles), and by "Confessions of a Congregationalist;" the latter by Judge Bennet's strong plea for "National Divorce Legislation," Col. T. W. Higginson's frank avowal of "Unsolved Problems in Woman Suffrage," and Rebecca A. Felton's exposure of the shocking "Convict System of Georgia." President Angell tells how he was educated, and it is pleasant to find one prominent teacher acknowledging deep obligations to many of those who taught him; Lieut. Zalinski writes on "Submarine Navigation," and J. C. Adams on "Literary Log-Rolling;" while Henry C. Lea scourges the "People of Philadelphia" as Dr. Crosby, a little while ago, scourged the people of New York.

TENNYSON'S new poem, "Locksley Hall Sixty Years After," is taken by Walt Whitman as the text of a few words about the Laureate in *The Critic* of January 1st. He says that, beautiful as was the original "Locksley Hall," it was "essentially morbid, heart-broken, finding fault with everything," and that the pessimism of the newly-written sequel to it is "a legitimate consequence of the tone and convictions of the earlier standards and points of view." He holds the poet's personality in higher esteem than his poetry, and says:—"Yes, Alfred Tennyson's is a superb character, and will help give illustriousness, through the long roll of time, to our Nineteenth Century. In its bunch of orbic names, shining like a constellation of stars, his will be one of the brightest. His very faults, doubts, swervings, doublings upon himself, have been typical of our age. We are like the voyagers of a ship, casting off for new seas, distant shores. We would still dwell in the old suffocating and dead haunts, remembering and magnifying their pleasant experiences only, and more than once impelled to jump ashore before it is too late, and stay where our fathers stayed, and live as they lived. Maybe I am non-literary and non-decorous (let me at least be human, and pay part of my debt) in this word about Tennyson. I want him to realize: that here is a great and ardent Nation that adores his songs, and has a respect and affection for him personally, as almost for no other foreigner. I want this word to go to the old man at Farringford as conveying no more than the simple truth; and that truth (a little Christmas gift) no slight one either. I have written impromptu, and shall let it all go at that. The readers of more than fifty millions of people in the New World not only owe to him some of their most agreeable and harmless and healthy hours, but he has entered into the formative influences of character here, not only in the Atlantic cities, but inland and far west, out in Missouri, in Kansas, and away in Oregon, in farmer's house and miner's cabin."

#### BOOKS RECEIVED.

*The Morphine Habit (Morphinomania), with four Lectures on the Border-land of Insanity; Cerebral Dualism; Prolonged Dreams; Insanity in Twins.* By Prof. B. Ball, M.D., of the Paris Faculty of Medicine. Translated from the French. New York: J. Fitzgerald. 1887. 43 pp. 15 cents. ("Humboldt Library.")

(Continued from page 919.)

hold it in his hand when the ship underwent any shock. This was to prevent the works from being injured.

6. Vessels reach this part of the coast. They are frequently met by snow storms and gales. They mock the seaman's strength. They set at nought his skill.

7. He was a very badly-behaved character. He would not be induced to take his hat off. He would not take his hat off before a king. These are the reasons why he stood there. This is what the old nurse said.

8. The Greeks had not yet acquired an immense superiority in war. They had not acquired it in science. They had not acquired it in the arts. This superiority led them to treat the Asiatics with contempt. This was in the following generation of the Greeks.

9. I crossed the sand to my tent. The moon was shining brilliantly. It shone through the palm trees. It silvered the sands. The red firelight lighted up the swarthy faces of the Ishmaelites. It lighted up the uncouth forms of the camels. The whole was grouped with the inevitable picturesqueness of the East.

10. At eight o'clock I go outside my tent. I pitch my folding chair. I take my breakfast. This consists of a cup of chocolate with condensed milk and a bowl of rice.

11. The human skulls are those of their victims. They have been eaten by the tribe. They speak of this food as the greatest luxury. They think those are fools who despise it.

12. I shut the door of my lodging behind me. I came out into the streets. It was six o'clock. It was a drizzly Saturday evening. It was in the month of January. All that neighbourhood was looking very desolate.

A. M. B.

### CONCERNING A KEEPING-IN.

MANY teachers "keep in" pupils; some do it for late-coming only, but some do it for misdemeanors of all sorts. There are many of them who doubt the efficacy of keeping-in, yet they do not see any other way.

I had a large school and I employed "keeping-in" in every department. I had a Latin class on which I prided myself a good deal. Every one of this class was almost a picked scholar. One day they seemed to have made up their minds to "keep in." They giggled and then another; when asked some question relating to the lesson, they did not know. I felt that the dignity of the school must be kept up and that the lesson must be learned. So I gave the command, "The class will stay after school." I was sorry to have my model class stay, but I felt it could not be helped.

The next week that class was kept in again; then it got to be two nights in a week, then three, then four, and finally it was the regular thing to stay after school. I was mortified; I was really angry with the class. I did not want to stay, and I felt it was not necessary that I stay, but they would come without their lessons.

I had an assistant teacher,—a pretty wise fellow,—and he continued to say he thought it was "a habit they had got into." I pondered over the matter a good deal and determined to break up that habit. At the close of the lesson that day I said: "I fear I may have given you too long lessons. How much will you take for the next and not need keeping-in?" (There were ten sentences in the next lesson.) "Will you take eight?" No answer. "Seven? Six? Five? Four? (A stir arose.) Three? (They began to look at one another.) Two?" "Yes, sir." "Very well. Remember, no keeping-in." The next day that class was ready. After the two sentences were reviewed, there came the question, "How long shall the next lesson be?" It was settled at the same length as the other. I felt afraid they were wasting their time, but yielded.

Gradually the lessons were extended, but I had learned a lesson; I must not permit a class to fall into the habit of staying after school.

I employed keeping-in for small misdemeanors, but after a long trial found it was of little avail. I encouraged the pupils to stay if they wanted to consult me.

This plan I found to be good. I divided the school into sections, from 1 to 10. The dismissing hour was 4 P. M. At 3:15 I called off the names of the No. 1 section—those not reported as deficient, or late, or charged with misconduct. They rose and were dismissed. Then the names of the No. 2's, then of the No. 3's, and so on. Generally one-half went off with the No. 1's. Any pupil could stay if he thought he was in too low a number, and find the reason. Those who were late could make up the time during these fifteen minutes. By struggling against "staying in" very much of it may be avoided. The last moments of the afternoon should be reserved for words of kindness and cheer.—*Teachers' Institute.*

### BRIEF LESSON PLANS.

#### EXERCISE IN SOUND.

EYES closed. Touch a bell and ask, "What did I do?" "How do you know?" "With what did you hear?" "All look and listen." Touch a glass and a piece of wood. "Close your eyes." Touch one only. "Which did I touch." See that the class agrees. "How could you tell?" Touch an empty glass and a glass full of water, a piece of tin and a slate, and various other objects, and let the pupils distinguish by the sounds. Let

them name sounds they like, and those they do not like; let them recognize each other by the voice and footstep; show them that many words express by their sound their meaning; let them say correctly the following:—1. The bell rings. 2. Boys whistle. 3. A bee buzzes. 4. Geese hiss. 5. Birds sing. 6. Parrots talk. 7. The cat mews. 8. Horses neigh. 9. Peacocks scream. 10. A robin chirps. 11. A rooster crows. 12. The dove coos. 13. The duck says, "quack, quack." 14. The crows caw. 15. A hen cackles. 16. Lambs bleat. 17. We whisper, laugh, talk, sing, shout, and whistle.—*New York School Journal.*

### CLEANLINESS AND TIDINESS.

WHAT is the best means of promoting cleanliness and tidiness among scholars?—E. M. R.

The teacher himself or herself should be a model in cleanliness and tidiness. His desk and those of the pupils should present an orderly appearance at all times. The floor and shelves under each desk should be carefully watched. Do not be afraid of using a duster during school hours. If a book, the globe, or any article of furniture presents a dusty appearance, remedy it. You can show by numerous acts that you abhor dirt and disorder. They will catch the spirit from you, and it will not be long before the most glaring faults disappear. When an unwashed face appears before you some morning, if the opportunity occurs, speak to the child personally; or in a general way mention the matter before the school, and the guilty one will disappear under his desk, to appear with his face shining. One of the most delicate subjects to approach scholars on, is the care of the nails and teeth; but opportunity is afforded for advice and suggestions, in connection with physiology and hygiene. Improve this time and make the talk so plain and pointed that all may be benefited.—*Teachers' Institute.*

NOT long since were recorded some interesting experiments in which M. Ch. Zenger secured photographs in the darkness of a moonless night through the imperceptible phosphorescence of certain objects which had been brightly illuminated during the day. M. D. Tomassi has now described some even more remarkable effects under the euphonious name of "fluviography." By an exposure of a few minutes' duration, he has impressed upon a photographer's sensitive plate an image of an object through which a silent discharge of electricity was passing, this result being obtained even when care was taken to ensure perfect darkness and with a current of too low tension to give any sign of light. The theory of the experimenter is that a body under electric influence emits "electric rays" analogous to the dark rays of the spectrum.

## Educational Intelligence.

### COUNTY AND HIGH SCHOOL.

THE following is from the Peterborough *Examiner*:—The number of pupils from the County attending the Belleville High School having increased, the matter was referred by the County Council to a committee, who reported as follows:—"Your committee appointed to confer with a committee of the Board of Education in the City Belleville in respect to the pupils from this county attending the city High School, beg to report. That your committee met the city committee and found that forty-five county pupils are now in attendance at the High School. That that number of pupils will cost the city, based on last year's expenditures, allowing nothing to the city for the cost and use of school building for the whole year at least \$600, and this year's expenses of the school will be greater than last year's were. That your committee agree to give Belleville High School, for the first half of the year for taking the county pupils, \$300; this arrangement to end with the midsummer vacation."

### WANTED A HIGH SCHOOL!

WHEN we take into consideration the very limited education our children are able to acquire under the large number of third class teachers, who form the majority, on this Island, says the *Algoma Gossip*, printed at Little Current, we think that an effort should be made to obtain that very necessary adjunct to education, a High School. We don't care two straws where it may be erected on the Island, as long as it is erected so that our children may enjoy the benefits that institutions of this kind confer on those in counties and towns below. Of course the questions of "how can we support it?" will arise; but this is easily settled. Let every municipality impose a small tax, two mills on the \$, on the whole Island assessment and the usual Government grant for each pupil attending, should be more than sufficient to successfully meet the expense. The councils of the various Municipalities should communicate with each other on the subject. Let the Reeve of this Municipality, who is an old hand at the blackboard himself, take the initiative. We should be glad to receive the ideas of the school teachers on this very important matter.

### UXBRIDGE SCHOOL BOARD.

AT a recent meeting of the Uxbridge Board of Education, plans for the new High School were received from different architects and the Secretary and Mr. Walker, were appointed a committee to confer with local builders with reference to the plans so as to arrive at some estimate of the prob-

able cost of each and report at next meeting. At this meeting a communication was received from Edwards and Webster, of Toronto, saying that they would undertake to modify their plans to suit the Board and keep within the limits of cost. The Committee reported on plans. They preferred that of Mr. Post, but thought it would entail too high a cost. Edwards and Webster's plan would also exceed \$5,000. The other one received, from Aylesworth, could be built for the \$4000, but they did not consider it suitable. After discussion Mr. Davidson, seconded by Mr. Hickie, moved that Messrs. Edwards and Webster be asked to view the ground and undertake plan for the building. Mr. Chapple, seconded by Mr. Crosby, moved in amendment that the Secretary write to Mr. Post of Whitby, inviting him to come to Uxbridge, inspect site and confer with the Board and see if a suitable building can be erected for the money at their disposal.—Carried 5 to 3. On motion Property Committee was authorized to purchase stone for foundation of new High School, as it could be bought cheaper now than a few weeks later.

### DUFFERIN TEACHERS' ASSOCIATION.

THE school teachers of this county met in association in the public School, Orangeville, on Thursday and Friday, 27th and 28th of January. Mr. Steele, R. A., Principal of Orangeville High School, and president of the Institute presided and opened the meeting with an address. Mr. R. A. Gray, Orangeville High School, read a paper on Punishment. Several teachers expressed their opinion on the subject, all agreeing that corporal punishment should, so far as practicable, be abolished. Mr. McMaster, of Shelburne, gave a model lesson on How to Teach Music. Music should be taught in every school and teachers should be prepared to teach it. Mr. McFerran gave an exhaustive address on the study of Anatomy and Physiology. Mr. J. J. Tilley, director of Institutes, gave an address on Discipline. Messrs. Steele, Acheson, and others discussed the subject at length. Rev. Mr. Hunter addressed the association briefly on the work of the teacher. The Ryerson memorial fund was discussed and the teachers decided not to contribute any more to the fund. Miss Jelly gave a lesson on the Combination of Colours. Mr. A. H. Ross took up the subject of Grammar. Miss Field showed how to teach problems in the simple rules to junior pupils. Rev. Mr. Gilchrist, of Cheltenham, gave an address on The Elements of Success in Teaching, and received a vote of thanks. Mr. Tilley gave another address on The Relation of the Teacher to his Work. The evening meeting in the Town Hall was largely attended. Mr. Tilley gave an excellent address on the Relation of Education to the State.

MR. OLIVER has charge of the Saintfield School.

MR. H. HAMMELL is the new teacher at No. 1, Pelee Island.

A NEW library has been added to the Norwood High School.

ACRON sends ten pupils to the new high school at Georgetown.

MR. J. NICHOLS is teaching this year at the Norland School.

MISS ANNIE MOORE, of Newcastle, is teaching Enterprise School.

THE Cowanville School, Clarke Township, is without a teacher.

HARRY HAMMELL is the new teacher of School No. 1, Pelee Island.

MISS ELLEN CHRISTIE has gone to Orillia to take charge of a school.

MISS HATTIE WALKER is teaching school a little east of Newcastle.

MISS HOPPER, of Whitby, is now teaching in S.S. No. 11, Violet Hill.

MR. C. P. MACKENZIE is teaching successfully at S.S. No. 5, E. Williams.

MISS BELLA MCFARLANE has secured the position of teacher at Sunnyside.

MISS MILLAR has taken in hand the second teacher's work at Waukaushene.

MR. B. MAYBEE, has been re-engaged at Victoria Corners for the year 1887.

MR. MCARTHUR, of Duart, has been engaged as third teacher in the Highgate School.

THE Board of Education has located the Albert County Grammar School at Alma (N.B.)

MISS SMITH, formerly teacher at Alloa, is at present attending Brampton High School.

MR. JOHN T. LAWRENCE has been appointed assistant teacher in the Claireville School.

MISS FLETT, formerly teacher at Hopeville, received an address on leaving that place.

MISS PILKINGTON, of Toronto, has commenced her duties as school teacher at Fesserton.

MR. J. TURNBULL, of Orangeville, has been secured as teacher of S.S. No. 6, Dundalk.

It has been found necessary to employ an additional teacher in the Whitby Model School.

THE new teacher at Bexley, Miss L. Levey, commenced her duties on Tuesday, Jan. 4th.

MISS GOODRICH, of Anderton, has been appointed teacher of School No. 3, Sandwich.

MR. L. LAPP, Uxbridge, has accepted the position of principal of the Pembroke High School.

THERE were six applications at Chatham recently for the position of teacher at \$500 a year.

THE seating accommodation at the Dundas High School, we hear, is inadequate for the attendance.

MR. SHERMAN, of Toronto, takes Mr. Verness's place as assistant at the Vienna High School.

THE trustees of S.S. No. 1, Oso, have engaged Miss Thompson, of Renfrew County, as teacher.

MR. R. J. NIDDERY, the ex-principal of Hampton School, is attending Toronto Normal School.

MISS MARY C. LAJEUNESSE, of St. Lacrosse, Que., is teaching the R. C. Separate school, 9th con.

THE Board of Health has seen fit to close the school at Carson's Siding, on account of diphtheria.

THE Manilla Trustees have secured the services of Miss Foote for the second division of Manilla School.

MR. JAS. A. ARMSTRONG, lately teacher at Mayfield, is now attending the Normal School at Toronto.

J. A. BOTHWELL, teacher of the school in Section No. 4, Mersea, has died in consequence of sickness.

EIGHT new desks have been placed in the Bradford High School for the accommodation of extra pupils.

MISS MCLAREN, Harwich, has been engaged by the trustees of S.S. No. 5, Raleigh, as teacher for the year 1887.

MISS J. MCKINNELL, late teacher at Forest Home, goes to Ottawa to take a term at the Normal School there.

MR. F. BARNETT has removed from Sydenham to Landsdowne, having become principal of the public school there.

THE Lindsay School Board have made a grant of \$400 to purchase books for the library, maps, and other equipments.

MR. MCNEILL, of No. 2, Downie, opened for the first this year, on the 18th ult., after a severe attack of inflammation.

CATARAQUI sends out two new teachers this year, one (Miss Ely) to Westbrook, and one (Miss Leaney) to Jackson's Mills.

THE attendance at the Seaforth High School has become so large that it has become necessary to add a fifth teacher to the staff.

REV. MR. GEOGHEGAN has presented four nicely framed pictures and a number of illuminated tracts to the Greensville Public School.

AMHERSTBURG School Board has decided to make an appeal to the County Council for help to erect a new building next summer.

THE children are having quite a vacation in S.S. No. 1, Petite Cote. The school is not opened, no teacher being found yet.

MR. R. GOURLAY, B.A., teacher of modern languages and history, has been appointed for that vacancy in Caledonia High School.

MISS MCNEIL, of Paisley, has been engaged to teach the form left vacant by Miss Pearson not being re-engaged at the Warton School.

The Hastings Public School had a very narrow escape from destruction by fire recently. The school was closed for a day or so for repairs.

THE trustees have secured the services of Miss Reid, of Walkerton, for junior department of the Tara School. Her salary is \$200 per annum.

THE pupils of the Coulson Public School give an entertainment every Friday evening. Half of scholars providing the entertainment on alternate nights.

MISS CAWSTON, assistant at Schrippingville, who has been indisposed for the past few weeks and unable to teach, has resumed her position in No. 2, Ellice.

THE new teachers, Mr. James White and Miss Edith Thompson, have entered on their duties, the former at the Collegiate Institute, the latter at the Model School, Whitby.

THE Dresden School Board has had a discussion on the Bible question, whether or not the scriptural selections or the whole book should be used. The vote resulted in a tie.

THE staff of Parry Sound Public School have been re-engaged for 1887—Mr. McEachran \$550; Miss McIntyre \$375; Mrs. Morrison \$300; Miss Ellis \$240. No. of pupils enrolled 300.

MR. J. S. WINNACOTT, teacher of Cedar Creek School, Balsam, is forming a foot-ball team which he thinks will be able to play any school in the county, and come out with glowing colours.

MISS TRETHERAWAY, of Stratford, has been appointed assistant teacher in the Penetanguishene Protestant Separate School in place of Miss McIntosh, who did not receive notice in time.

MISS HEASLIP, who has had charge of the brick corner school house, Manvers, during the past year, re-opened again for another term, and Mr. R. Grandy takes charge of the Lifford School again.

MISS EDITH PETERSON, who has been visiting her sisters, Mrs. Jas. Berry, of Windsor, and Mrs. Oscar Greiner, of Kingsville, has returned to her home, at Bear Lake, Mich., to take charge of her school.

A NUMBER of the Chatham Collegiate Institute pupils have been in the habit of loitering and dropping in after prayers. They have been warned that persistence in this course will lead to suspension.

THE attendance at the Harrison High School would have been much larger had there been accommodation for more. As it is, every available foot of space has seated, and the school is overcrowded.

A MEETING was held in the school house, Victoria Corners, a few weeks ago, the object being to consider the advisability of building an addition to the school for junior classes. It is to be ready after midsummer.

THE Middlesex County Council have appointed the School Inspectors, and Messrs. McColl and W. F. May to be the Board of Examiners for public school teachers, and the examinations are to be held at Strathroy and London.

GREAT improvements have been made by Mr. Noble in the Science room of the Whitby Collegiate Institute. When Mr. Seath comes around again, he will have to employ a pair of Lazarus's best to discover cause for complaint.

MISS BELL, who is soon to sever her connection with Nilestown School, was presented with a gold watch, accompanied by a suitable address. About 100 persons gathered at Francis Barrows' residence, where the presentation occurred.

THE staff of teachers at the Bracebridge School is at present composed as follows: George N. Thomas, headmaster; Dr. Davis, first assistant; Miss Reynolds, second assistant; Miss Green, third assistant; Miss Montgomery, fourth assistant.

IT is said that Professor Robertson, of the Ontario Agricultural College, Guelph, is to sever his connection with the college on the first of

March. He is to go back to his old business of exporting dairy produce, and will commence business in Montreal.

THE French committee of the Ottawa Separate School Board, held a meeting in the board room, to ascertain definitely the financial standing of the board, and to consider the advisability of taking steps towards having new schools erected for the French children.

THE public schools, which re-opened recently, have a largely increased attendance, so much so that many of the rooms are greatly crowded, there not being seats for all the pupils. The classes have all been formed, and everything is working quite smoothly.—*True Banner*.

THE statutory meeting of the Public School Board of Wyoming was held on Jan. 17th. Moved by Mr. J. Newell, seconded by W. J. Travis, that a public meeting of the ratepayers be held in the school house on Thursday evening to ascertain the expression of the people regarding fitting up the Council room and hiring a fourth teacher—carried.

THE Building Committee of the Board of the Ottawa Separate School Trustees inspected the new building at the St. George's Ward Primary School, to see how far the plan of internal arrangement was suited for the proposed new school in Wellington Ward. The plans for the latter will be drawn at once, and it is expected that building will be commenced in the spring.

WE usually term our Orillia High School the "Collegiate Institute," because practically it is one. It does not legally receive this title until 100 scholars are on the roll. At present there are about 97. The principal expects to have the full hundred before the term is out, and then it will be the Collegiate in very truth.—*Orillia Correspondent of Whitby Chronicle*.

THE students of the Ottawa Collegiate Institute are forming a mock parliament in connection with the Lyceum of the institution. The members on the Conservative side of the house are adorned with blue badges, and the members of the Liberal side, with red badges, in order to distinguish the speakers in the debate. The parliament will be opened on Fridays after school hours.

THE English-speaking committee of the Separate School Board, held a meeting recently at Ottawa, at which were present Messrs. Smith, Lynch, Enright, and Secretary Findlay. The question of raising the necessary \$20,000 for the erection of the school for the English-speaking Roman Catholic children of the city, was discussed, but no definite plan agreed upon.

FRIENDS will learn with regret that Miss J. Holtorf, Lindsay, has been compelled, owing to poor health to resign her position as teacher of the east ward school. In accepting her resignation the school board expressed the hope that Miss Holtorf would in the future regain her health and resume her duties as teacher. Miss Finney will fill the position made vacant by Miss Holtorf's resignation.

ALTERATIONS have been made in the seating arrangement of Mr. Stirling's room in the South Ward School, Peterborough. Heretofore the pupils have been sitting facing the light—not just the best arrangement in the world for either convenience or advantage. By the new system of seating this

annoyance has been obviated. All the other rooms will be similarly re-arranged. Other schools might take this hint.

AT a recent meeting of the Emerson School Board, a committee was appointed to see if arrangements could be made to open another room. We judge, therefore, that they are satisfied that another teacher is needed. It is reported, however, that they cannot raise the money to pay another teacher. This will hardly satisfy parents whose children are crowded—one hundred and twelve of them—into two ill-ventilated rooms. The school board have taken the management of their finances entirely into their own hands, have a collector of their own, and all powers the law can confer, and they must be held to a strict accountability.—*Ex.*

AT the first regular meeting of the Parkdale School Board, owing to the rapid growth of the school in new pupils, another class-room was decided to be opened at once, and Miss Nellie Duncan was appointed teacher at a salary of \$350 per annum. It was decided to exclude all non-resident pupils from the city until further accommodation is provided. On recommendation of the School Management Committee, Yagg's Anatomical Chart was ordered to be purchased at a cost of \$40, also the supplies for the current year. On motion the Committee on Sites and Buildings were requested to bring in a report at the next meeting respecting the erection of a new school building.

AN idea of the overcrowded condition of the teaching profession may be formed by the number of applications received by the Chatham Board of Education, for the position of male teacher in the Central School. Fifty applications were received, thirty-eight of these being persons well qualified to fill the position, some of whom had been teaching for years, and some of whom were university graduates, holding the highest certificates obtainable, and all were anxious to secure a position, the remuneration for which was only \$400 a year. Sidney Silcox, of Iona, was the lucky applicant, and was appointed to succeed Mr. C. Maxwell, who has commenced the study of law in Mr. John McLean's office.—*St. Thomas Journal.*

THE trustees of Snake Island School, Section No. 14, Osgoode, have lately gone through an experience. They were without a teacher and received numerous applications, amongst them being one from a duly qualified teacher. This teacher was chosen by the trustees, and in due course received a letter informing him that he "was appointed at a salary of \$280," and if he accepted "to come right on." Thereupon he wrote to say that he was coming, but owing to the snowstorms the letter did not reach its destination for a week. Another week glided by, and still the licensed impartier of knowledge did not turn up, so the trustees met and appointed a teacher who did come right away. Some days after the long expected man arrived to find his supplanter hard at work, and that his tardy services were not required.

AT the Union S.S. No. 3, King and Whitechurch, the second polling for school trustees was very exciting, and at its close the chairman announced the total vote as follows: Walker 51, and Webb 47—a majority of four. But the chairman

omitted to declare Mr. Walker elected, as he conscientiously considered he was not. Another application to the Inspector to set aside the election, has been made on two points: 1st. Six landholder's sons voted for Mr. Walker, and one for Mr. Webb. The law for school elections does not recognize landholders' sons, but does not exclude farmers' sons. But the Assessor in making the roll, and Clerk in making out the Voters' List, entered these persons as landholders' sons, when they should have properly been entered as farmers' sons. Shall the irregularity disqualify them from voting. 2nd. Should the chairman declare elected the one having the greatest number of votes, when he is conscious that the letter of the law has not been followed, and the election of either men was depending alone on that point? Mr. Davidson, the Inspector, has referred the matter to the Minister of Education.

THE first meeting of the new Whitby School Board was held on the 10th inst. Mr. Ormiston asked if any member of the board had taken the trouble to ascertain whether or not the report was true that Mr. Woodhouse, teacher of Dufferin Street school, was sick or not. Mr. McClellan said he believed Mr. Woodhouse was sick, but was still teaching. Mr. Rutledge said he had intended to bring up this matter of the Dufferin Street school. Mr. Rutledge feels sure there is none but the most friendly feeling prevails at this board for Mr. Woodhouse, and that no injustice will be done him; but either he or some bad boys need looking after. Mr. Ormiston had heard no complaints against Mr. Woodhouse, but against some bad boys who attend that school. These were said to have taken advantage of Mr. Woodhouse's advanced years. Mr. Ferguson said if this were the case such boys ought to be turned out. However, he would move, seconded by Mr. Rutledge, that the School Management Committee take the matter in hand and report on their investigation at next meeting. Mr. Dow would like the committee's powers so extended in the resolution as to permit them to have the assistance of the County Inspector. The motion was so amended and passed.

#### DR. WILSON ON RACE-INTER-CROSSING.

To the Editor of the EDUCATIONAL WEEKLY.

SIR,—You recently gave an extract from the *Popular Science Monthly* on the subject of Race-intercrossing in North America. Will you permit me to make a few remarks on the subject?

It is not difficult to cull from literary sources materials for supporting the hypothesis that many typical Americans derive their chief characteristics from an admixture of Indian with European blood. Indeed, a company of frontiersmen round a camp fire, each in turn telling his tall and ever taller story, in a sententious manner and with stolid countenance, amid the ejaculations of his companions, all placidly occupied with the sober pipe of peace, might easily be mistaken by a somewhat green stranger for a party of Indians who had doffed some of their more striking habiliments. Dr. Wilson seems to have been struck with an idea of this sort. He also seems to have recognized some "semi-Indian" features among the members of the highest classes of society, and

even among what he terms "selected social circles." On these observations he founds a theory of the "absorption," not the "extinction" of the native Indian races.

While travelling through the country districts of Ontario some dozen years ago, the same idea occurred to me. I fancied I discovered among the farmers many with, not "semi-Indian," but very marked Indian features. Being of rather an inquisitive turn of mind, I made some inquiries into the matter, and soon found that my notion, to say the least, was a little astray, at all events, in the instances I had come across. In all the most striking examples I had noticed, I found that the persons in whose features I had imagined myself to have discovered traces of Indian descent claimed to be of pure Scotch or Irish descent, and most of them were immigrants of but a few years' residence in Canada.

That Dr. Wilson should formulate a theory on what must necessarily be but a very limited number of rough personal observations such as these, is very startling. I have a faint recollection of some similar generalizations in "Robinson Crusoe": but I should hardly have expected such work from a nineteenth century scholar; especially on a subject which, one would think, ought primarily to be made amenable to the discipline of the statistician.

I would offer it as a suggestion that the climate and surroundings may have a considerable effect in modifying the features and facial expression of Europeans who come to this country; and that such modifications would always be more striking and perceptible in country districts, where the people are far more exposed to climatic influences than in the towns, and where the conditions of life are most unlike those of the old countries. But I do not wish this suggestion to count for much in this case, though I have heard a similar one made in regard to the Anglo-Saxon race in Australia, and fancy I have seen its verification in visitors from that distant land. What I do wish to point out is, that this appears to me to be a subject eminently suited for inquiry on statistical lines, and is not one on which a philosopher should hazard a theory simply based on a few personal observations, most likely of a totally misleading character; though it must certainly be acknowledged that the "semi-Indian" features must have been very marked indeed for the learned Doctor to have perceived them under the paint and powder and other accessories of dress, or scarcity of dress, at a Governor-General's assembly.

Perhaps the theory of Natural Selection may do duty for us here. It is not difficult to find among the English and Scotch, the Irish and Welsh, persons who have been favoured by nature with features more or less like those of some Indians we have seen (and even perhaps Chinamen and Turks), and whose countenances, reflecting the inward man, may mark their owners as being more suitable than their fellows for taking the place of the dying-out natives. The severe climate and the concomitants of a newly-settled country may do the work of evolution, and in a generation or two we may see a race more or less like the displaced savages, or at least exhibiting some of their characteristic features prominently. Is this not as good an idea as the worthy Doctor's?

Yours truly,  
J. G. ELLIS.



**NORTH HASTINGS  
UNIFORM PROMOTION EXAMINA-  
TIONS.**

DECEMBER, 1886.

**ENTRANCE TO THIRD CLASS.**

**MENTAL ARITHMETIC.**

1. JOHN had 47 plums, and gave five to each of his brothers and kept the smallest share himself; how many brothers had John? What was his own share?
2. Frank having 68 cents bought 7 tops, and had five cents left; what was the price of each top?
3. If 12 inches make one foot, how many feet are there in 20736 inches?
4. Add 17 to 20, subtract 9, divide by 7, multiply by 25, subtract 4, divide by 8, add 8, multiply by four, subtract 20, add 30, divide by 10, multiply by 8, add 12, divide by 12, add 10.
5. James paid 18 cents for a slate, 14 cents for a ball, 22 cents for a book, and 21 cents for a knife. He gave in payment a dollar bill. How much change should be returned to him?
6. At \$109 for 13 tons, what will 26 tons of hay cost?
7. Two men are 72 miles apart. They walk toward each other for two days, one at the rate of 17 miles daily, and the other at the rate of 16 miles a day. At the end of the two days how far apart are they?

**LITERATURE.**

1. Write Thackeray's answer to the question, "What is it to be a gentleman?"
2. What is said to be "the house for the seeds?" Why is that name given to it?
3. Why are the leaves of plants *thin* and *broad*? Of what use are leaves to plants?
4. Write words that mean the same as: Suck up, between the dark and the daylight (one word for the phrase), braggart, groped, resistless power, existence, showed no inclination, blight our prospects, overseer, breeds contempt. (3 for 2nd, 2 each for 7th, 8th, 10th.)
5. Write two lines of poetry that have the same meaning as "forgive me my debts as I forgive my debtors."
6. Name a fable and a poem both of which teach us that "too much freedom breeds contempt."
7. In your Reader there is a verse which teaches us not to be cruel to animals. Write the part of the verse which gives a reason for not practising cruelty.
8. Write the following expressions using, instead of each part in italics, a single word: the stamens *of the flower*, men *of honour*, the future *in the distance*, a dwelling *that can be moved*, should start *at once*, the vast *forever*.
9. Explain clearly the meaning of the following: The cause that lacks assistance, the wrongs that need resistance, an humble condition often brings safety, a miracle, with some judgment view it.
10. Name some of the *wrongs* that should be resisted by children, and some of the *causes* which they can assist. Name four or five of each.
11. Name three animals of the cat kind. Name two habits that all such animals have.

**COMPOSITION AND LANGUAGE.**

1. Write sentences containing the words: pail, pale; pare, pair; hare, hair; off, of; arched, restore, conscience, file, popular; knot, not; waist, waste.
2. Write questions containing words which mean the opposite of: fluid, a part, stiff, gathering, leisurely, preserved by the hunters, a modest child.
3. Use *I*, *you*, and *he* correctly in the blanks in this question: Were \_\_\_\_\_, and \_\_\_\_\_, studying?
4. Write this sentence, changing the words in italics to make them mean more than one, and making whatever other changes are necessary: That *lady's* child has gone to *my neighbour's* house

to tell him that his wife says that I am to get a loaf of bread for the man who lives near the church.

5. (a) Make a story about black-birds out of this:  $75 - 6 - 21 + 9 = 57$ .

(b) Make a story about sheep from this:  $54 \div 6 = 9$  pens.

6. Write sentence-answers to these questions. (Do not use the word *did*): When did you begin the task? Upon which stool did he keep his feet? How did he wear his hat? Whose dress did the dog tear? How many eggs did that hen lay? When did he go to town?

7. Write these sentences as they should be written: She did her work good. He has come to see me and teach me to sing. I didn't get no prize. I ain't going home. Ain't you learning your lesson? Henry James Richard i and you will be there. Can you not learn him and I to play?

8. Use the right form of the words *large*, *good*, *dirty*, and *busy*, in these sentences: Harry and James have large hats. Which has the hat? Simon and Peter are good boys. Which is the boy? What dirty feet the four dogs have? Which has the \_\_\_\_\_? My five playmates are busy boys, but one is the \_\_\_\_\_ of the group.

9. The teacher will show the pupils a picture that they have never seen. Let them examine it and write a story about it.

10. Write six sentences about a maple tree.

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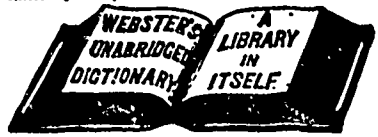
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