

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for scanning. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of scanning are checked below.

L'Institut a numérisé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de numérisation sont indiqués ci-dessous.

- | | | | |
|-------------------------------------|---|-------------------------------------|---|
| <input type="checkbox"/> | Coloured covers /
Couverture de couleur | <input type="checkbox"/> | Coloured pages / Pages de couleur |
| <input type="checkbox"/> | Covers damaged /
Couverture endommagée | <input type="checkbox"/> | Pages damaged / Pages endommagées |
| <input type="checkbox"/> | Covers restored and/or laminated /
Couverture restaurée et/ou pelliculée | <input type="checkbox"/> | Pages restored and/or laminated /
Pages restaurées et/ou pelliculées |
| <input type="checkbox"/> | Cover title missing /
Le titre de couverture manque | <input checked="" type="checkbox"/> | Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées |
| <input type="checkbox"/> | Coloured maps /
Cartes géographiques en couleur | <input type="checkbox"/> | Pages detached / Pages détachées |
| <input type="checkbox"/> | Coloured ink (i.e. other than blue or black) /
Encre de couleur (i.e. autre que bleue ou noire) | <input checked="" type="checkbox"/> | Showthrough / Transparence |
| <input type="checkbox"/> | Coloured plates and/or illustrations /
Planches et/ou illustrations en couleur | <input checked="" type="checkbox"/> | Quality of print varies /
Qualité inégale de l'impression |
| <input checked="" type="checkbox"/> | Bound with other material /
Relié avec d'autres documents | <input type="checkbox"/> | Includes supplementary materials /
Comprend du matériel supplémentaire |
| <input type="checkbox"/> | Only edition available /
Seule édition disponible | <input type="checkbox"/> | Blank leaves added during restorations may
appear within the text. Whenever possible, these
have been omitted from scanning / Il se peut que
certaines pages blanches ajoutées lors d'une
restauration apparaissent dans le texte, mais,
lorsque cela était possible, ces pages n'ont pas
été numérisées. |
| <input checked="" type="checkbox"/> | Tight binding may cause shadows or distortion
along interior margin / La reliure serrée peut
causer de l'ombre ou de la distorsion le long de la
marge intérieure. | | |
| <input checked="" type="checkbox"/> | Additional comments /
Commentaires supplémentaires: | | There are some creases in the middle of the pages.
Continuous pagination. |

If not called for within one month, the Postmaster will please return to the Local Superintendent.

JOURNAL OF

Province of



EDUCATION,

Ontario.

VOL. XXIV.

TORONTO, APRIL, 1871.

No. 4.

CONTENTS OF THIS NUMBER:

QUESTIONS ON THE NEW SCHOOL LAW ANSWERED.....	49
THE PRINCIPLES AND PRACTICE OF EDUCATION.....	50
I. PAPERS ON PRACTICAL EDUCATION.—(1) School-room Illustration. (2) Twelve Methods of Teaching Spelling. (3) "Let Nature be your Teacher."	51
II. PAPERS ON HABITS OF STUDY.—(1) Over Study by Children in School. (2) Hard Study Kills Nobody. (3) What is it that Kills?	53
III. PAPERS ON EDUCATION IN VARIOUS COUNTRIES.—(1) Education in Sweden. (2) Popular Education in Europe and America. (3) Cost of School Education. (4) Too Prevalent Superficial Education. (5) An Educational Warning to us. (6) New Basis of Education in Germany. (7) Prussian and French Conscriptions. (8) Progress of Education in Germany	53
IV. BIOGRAPHICAL SKETCHES.—(1) George Ridout, Esq. (2) John McNab, Esq. (3) J. W. Gilmour, Esq. (4) Robert Chambers, LL.D.	55
V. PAPERS ON FARMING.—(1) The Seed.—Spring. (2) \$100,000,000 Lost to Farmers by Insects and by their Foolish Destruction. (3) The Great Use of Birds to Farmers. (4) The Robin useful to Farmers. (5) Humane Education in regard to Animals. (6) How to make Boys Good Farmers. (7) How Good Farmers make money. (8) Canadian Standard Weights to the Bushel. (9) Reading for Farmers. (10) Ornamental Trees	55
VI. MISCELLANEOUS.—(1) The Coming of Spring. (2) Our Beautiful Surroundings. (3) The All-seeing Eye. (4) "Five Minutes Late." (5) The Journal of Education for Ontario	58
VII. MONTHLY REPORT ON METEOROLOGY OF THE PROVINCE OF ONTARIO	60
VIII. PAPERS FOR BOYS AND YOUNG MEN.—(1) To our Village Boys. (2) Perseverance, a Lesson to Boys. (3) Religious Education of Children. (4) Young Men's Rules for Life. (5) Something for Young Men to Read. (6) Picking up Thoughts. (7) The Triumphs of Old Age. (8) Self Taught Men. (9) Obstinacy Overcome. (10) Of what Profit is Knowledge. (11) Alphabet of Proverbs. (12) The Sunshine of Kindness. (13) Character and Benefit of Laughter.	61
IX. DEPARTMENTAL NOTICES.....	63

QUESTIONS ON THE NEW SCHOOL LAW ANSWERED.

1. *When did the new School Law come into force?*—We desire to state that the general provisions of the new School Act went into force on the 15th February, the day on which the Act itself received the Royal Assent. Certain portions of the new law cannot, however, go into operation until the regulations designed to give them effect shall have been prepared and approved by His Excellency the Lieutenant-Governor, in Council. They will, when ready, be published in this Journal.

2. *What is the present state of the Law in regard to County Boards?*—The County Boards of Public Instruction, formerly existing, having, by the Act of 1871, ceased to exist, any certificates expiring after 15th February (when the new School Act became law) may be renewed (until the meeting of the new Boards of Examiners) by the present Local Superintendents, who continue in office until the appointment of County Inspectors. No certificates of a permanent character can, however, be granted until the organization of the new Examining Boards—which will take place in July next.

3. *Where and how will the Examinations be conducted in future?*—They will take place in each County, probably twice a year. The new City or County Board of Examiners will be the City or County Inspector, and not more than four other Examiners appointed by the City Board or County Council. In regard to the Central Board of Examiners, the Council of Public Instruction for Ontario, at a meeting held on

28th March, 1871, adopted the following minute:—*Ordered*, That, as authorized by the twelfth Section of the School Act of 1871, the Reverend George Paxton Young, M.A., the Reverend J. G. D. Mackenzie, M.A., Inspector of High Schools, and James A. McLellan, Esq., M.A., be appointed a Committee to prepare papers for the examinations (to be held under the authority of the eleventh and twelfth Sections of said Act), of candidates for certificates as Public School Teachers; also to examine the answers of candidates for First Class Certificates, and to report the results of such examination to the Council.

4. *What Regulations have been made in regard to the new Inspectors and Examiners?*—The new Regulations on these subjects were given in detail in the February number of the *Journal*. Provision has also been made for holding a Special Examination of candidates for First Class Certificates (under these Regulations) in Toronto on the 18th and 19th of May, thus giving expectant candidates for Inspectorships an opportunity of qualifying themselves for that office. Another Examination will be held in each County in July. In the meantime it has been suggested to County Councils, in the Chief Superintendent's circular to Wardens, that the appointment of Inspectors in June be only temporary, and that the final appointments of these offices be deferred until January next, but that suggestion is superseded and withdrawn by the subsequent appointment of a special examination for all candidates for the office of County Inspector, to commence on the 18th of May. The County Councils will be furnished with the names of all persons qualified for the office, and can make the permanent appointments in June next.

5. *Would it not be a hardship to restrict County Councils in their choice of Inspectors to their own Counties?*—Certainly; it would be a great hardship to do so, and one which the law never contemplated, nor would it be wise to do so. Besides it would be an act of great injustice to First Class Teachers,—one chief value of whose certificates is that they are valid in every County of the Province—to tell them, when competing for the highest office in their profession, that their certificates, which the law of the land makes Provincial, shall by County Councils be only regarded as local and confined to the County in which they happen to reside. Besides, as the Government now pays one half of the salaries of these officers, upon the reasonable understanding that the best available men which the country will afford, and who are legally qualified under the

new law, shall be selected as Inspectors. It can have no local preferences in so important a matter; and the County Councils (which only provide one half the salary, but to which was confided the privilege of appointing these officers), will no doubt also appreciate the immense importance of selecting the best man for the new office irrespective of mere local claims and influence.

6. *Must Town Inspectors be appointed separately from the County?*—Not necessarily. The intention was that where towns formed part of the County for municipal purposes, and were represented in the County Councils, the same officer should be appointed and have the oversight of both Town and County Schools. Where the towns were separated from the county, and wished to exercise the right of appointment, it was hoped that they would unite with the county in selecting the same Inspector. In doing so they would gain financially, and would no doubt secure the services, as Inspectors, of very superior men. The law provides that Town Inspectors, when appointed separately from the county, shall be paid by the town appointing them, but, when appointed as County Inspectors, they shall be paid at the rate of not less than five dollars per school by the County Council, and the same amount by the Government. In the case of towns which are separated from the county appointing the County Inspector as their Inspector, the five dollars for each town school could be provided by the town (instead of the full salary which they would otherwise have to pay), and the other five dollars by the Government.

7. *How shall City and Town Inspectors comply with the 43rd Section of the new Act?*—This Section provides that "each Inspector of Schools is hereby authorized and required to deduct [two dollars half yearly] from any payments made by him to any male teacher under his jurisdiction, and transmit the same to the Education Department." Under the old law this could not be done; but under the new law, Section 6, (which provides that City and Town Inspectors "shall possess all the powers of a County Inspector—such City or Town Inspector—[except those relating to school elections] will be required to perform the corresponding duty of the County Inspector, and sign or countersign with the Chairman of the Board of Trustees all checks for the salaries of teachers. In doing so they will have to see that the semi-annual fee of two dollars, payable by each male Teacher under his jurisdiction to the Superannuated Teachers' Fund is deducted from the Teacher's half-yearly salary and transmitted promptly each January and July to the Education Department. This may be done in registered letters, or by deposit to the credit of the Provincial Treasurer in any of the branches of the Bank of Montreal. In this latter case the deposit certificate should be transmitted to the Education Department."

8. *How shall County Inspectors comply with the 43rd Section of the new Act?*—The latter part of the reply given to the preceding question will guide County Inspectors in this matter.

9. *What are the Holidays and Vacations under the new Law?*—Provision having been made by the Act of 1871, now in force, respecting the Summer vacations in the High and Public Schools, the prescribed vacations for this and the following years are as follow, viz. :—

High School Vacations—(a) From the Wednesday before to the Tuesday after Easter, inclusive.

(b) From the first of July to the fifteenth of August, inclusive.

(c) From the twenty-third of December to the sixth of January, inclusive.

The following are also to be kept as holidays :—The Queen's Birthday, and either every Saturday, or the afternoons of Wednesday and Saturday.

Public School Vacations—(a) From the fifteenth of July to the fifteenth of August inclusive.

(b) From the twenty-fifth of December to the first of January, inclusive.

The following are also to be kept as holidays :—Good Friday, the Queen's Birthday, Dominion Day, and every Saturday. No lost time can be lawfully made up by teaching on any of these days, or during the prescribed vacations.

10. *How does the new Act affect Union Schools?*—The new School law does not affect in any way the High and Public School Boards, as at present constituted. It simply changes their designation, but does not interfere with their functions or union. Should the Trustees themselves desire to dissolve the union, they can do so under the Grammar School law of 1865.

11. *How shall the studies in High Schools now be regulated?*—The provision to be made for a more extended course of study in the English branches in the High Schools will shortly be settled by special regulations, under the authority of the 34th Section of the

Act of 1871, and will come into effect after the Summer vacation. Until such regulations are prepared, the courses of study remain precisely as before.

12. *Are Arbitrations between Trustees and Teachers still legal?*—No. The new law provides that in future all disputes between Masters and Teachers in regard to salaries and other claims shall be settled in the Division Court.

13. *Can Rate Bills be still collected in School Sections?*—No. The first Section of the new Act abolished Rate Bills. From the 15th of February, therefore, all schools must be supported on the free school principle.

14. *What school accommodation is required under the new law?*—Regulations will shortly be published on this subject. But in the meantime Trustees will please remember that the words of the Act require them to provide ample "school accommodation," not only for the children actually attending school, but "for all the children of school age [resident] in their school division." This of course applies alike to the school-house, school-grounds, and outside conveniences, &c., for both kinds of pupils.

15. *What is the provision for teaching the Elements of Agriculture in the Schools?*—The regulations on this subject will also be published shortly. The intention is to provide for giving special instruction by competent teachers (as required by the new Act), in "the Elements of Natural History, of Agricultural Chemistry, and of Agriculture." An extra grant will be made to each school wherein satisfactory instruction is given under the proposed regulations in the subjects named. Provision has already been made in the programme for the Examination of Teachers for giving special certificates of qualifications to teachers in these subjects.

16. *Must the Boundaries of all the existing School Sections be changed this year, in conformity with the 15th Section of the new Act?*—No. The provision of the law is that "no School Section shall be formed after the year 1871, which shall contain less than fifty resident children, between the ages of five and sixteen years, unless the area of such Section shall contain more than four square miles."

17. *If a wife refuses to bar her Dower in a School site, how can Trustees obtain such site under the 17th Section of the new Act?*—A wife being only part "owner," the Trustees upon tender of payment of damages, as provided by law, to the husband (as legal "owner"), and its refusal or acceptance by him, can take and use the proposed site for school purposes. In such cases it would be well for the Trustees to register the award and a certified copy of all proceedings in the case in the Registry Office of the locality, so as to bind the land under the Act.

THE PRINCIPLES AND PRACTICE OF EDUCATION ;
OR, THE SCIENCE AND ART OF TEACHING. BY GEORGE VICTOR
LE VAUX, M.C.P.

(Continued from a previous No.)

A PUBLIC SCHOOL EDUCATION PREFERABLE TO A PRIVATE ONE.

Pupils of studious habits learn more book-knowledge from a private tutor, in the same space of time, than they could possibly learn in a public school. But on the other hand, they gain experience of the world and its customs at public schools, such as they could never acquire in their own homes. If privately educated they generally reach the age of discretion before they become acquainted with the vices or extravagances of life, and as their reason and judgment are then well developed they are better prepared to resist the enticements of the world than they could possibly be at an earlier age. On the other hand, if kept ignorant of the allurements of life during their early days, they are the more likely to be carried away by them when they escape from the restraints of home—when they enter the Universities or go into business. We have often seen this verified in the case of clergymen's sons. Kept in ignorance of the allurements of the world while at home, they frequently go beyond all due bounds when they leave the parental roof. We are inclined to believe that it is unwise to raise children in this way. Nature will have its course sooner or later. Too much restriction in youth is generally succeeded by licentiousness in after life. Unrestricted liberty, suddenly or unseasonably obtained, is frequently abused. As a rule, the succeeding licentiousness is in proportion to the antecedent harshness or indulgence of the ruling authority. Let children, then, be raised to know the world as it is; let a spirit be implanted in them by their teachers, parents, or guardians, which will enable them to steer their course free from the danger of shipwreck on the rocks, shoals and quicksands of life. Let them be raised to know themselves and their fellow-man, and we need not fear the result. They will then think, feel and act as become

worthy citizens—they will prove by their deeds that the discovery of truth and practice of goodness are the noblest objects of life.

SCHOOL COURSE THE BEST PREPARATION FOR THE DUTIES OF LIFE.

The public school is a miniature world, and its emulation, trials and triumphs are the best preparation for the battle of life. Private instruction may perhaps be best adapted for training youth to habits of virtue and piety; but if the affections and passions of human nature be not properly directed and duly restrained by a firm hand during childhood days, manhood is apt to be barren—totally devoid of those qualifications and accomplishments

“Which adorn youth, and cheer with brilliant rays,
The fading spirit of winter's gloomy days.”

Parental affection frequently nullifies parental authority. As a necessary consequence the child is indulged intemperately, and all the evil propensities of human nature develop themselves unchecked. It is seldom so in the public school or collegiate institute. In those places the various powers of the mind are called into activity by the noble influence of example. Emulation is excited, and every pupil knows and feels that shame and disgrace are sure to follow idleness. In those national institutions, the obstinate heart is induced to yield a willing obedience; friendships are formed which endure forever; equality is felt, and no superiority acknowledged except that of merit: the diffident and shy become confident and bold; the rude learn politeness, and literary improvement is pursued by all. Some learn from their companions, others from their books and teachers; but the fires of zeal and emulation gradually seize upon all—upon even the most indolent. Here, as the mind of the child or the youth gradually expands and he proceeds on his way to the temple of learning, he will have the sweet companionship of fellow-travelers. He will learn to esteem the noble qualities of generosity, gratitude and courage, and be led to despise or detest perfidy, ungratitude and selfishness, because his companions do so. The good he will be taught to cherish in his heart and treasure up in his bosom, whilst he learns to shun evil as if it entailed instant death. Finding therefore that his reputation depends on his own conduct, and being constantly impelled to act with decision, his mind will gradually expand, whilst he attains a certain firmness and manliness of character otherwise unattainable. He will thus learn to feel that patience and energy, perseverance, fortitude and industry are the true elements of success, whilst he becomes convinced that real merit, like a river (“the deeper it is the less noise it makes”), is silent in proportion to its depth.

It is absolutely necessary that those who are destined to occupy important positions in society, should enjoy the advantages of a good, sound, liberal education—an education which will tend to fit them for their future calling. One of the greatest duties the men of the present owe to posterity, is to make a liberal provision for the efficient education of the rising generation. Should they not do so, their sin will be visited on their posterity “to the third and fourth generation.” This public provision should be national. Every parent, rich or poor, should be compelled to send his child to some public school—that is, a school taught by a teacher or teachers licensed by Government—for each child in a country is as much the child of the nation as it is the child of the parent; the nation, therefore, should see to its welfare.

The success in life of each child depends on the cultivation of its talents by appropriate studies—on the proper training or development of its intellect—on the amiability of its disposition and the morality of its early youth. Public schools are the best arenas for affording the necessary training for success in life. Parties educated by tutors at their own private residences are frequently noted for their awkwardness and timidity. Moreover they seldom fail to contract the habit of looking upon the world through a narrow bigoted channel. Others again, not having the opportunity of coming in contact with very enlightened or superior minds, imagine themselves to be beings of gigantic intellect, of angelic mould—by birth, position and education, worthy of the worship of their fellow-men. Alas! poor creatures! their self-conceit and imaginary importance only excite the pity of their friends and the contempt of their acquaintances. They go out into the world, they come face to face with men and women, they then become conscious of their own insignificance—they discover at last that they are nonentities, and pray to the prairies of the west and the forests of the east to hide them from the cold cheerless world; from the illiterate (!) sons of science who laughed at their pretensions; from those parties who are incapable of appreciating their rare qualities!!! Often have we known such parties—often have we smiled as we listened to the crowd imitate the scream of the eagle. Ignorance and inexperience are only excuses for such erratic pretensions—such selfish stupidity. So far as we could learn such parties never enjoyed the advantages of a good public school education. The foolish pride of parents, the culpable vanity of estate—antiquated ideas of a dark and

barbarous age—clinging to the skirts of their garments, prevented them from enjoying such benefits. Their education, such as it is, was imparted by private tutors *only*, and they have probably been instructed without being educated. At all events they are too ignorant to be conscious of their own deficiencies. How deplorable is such a state of things!

In the education of our children, if we are to have a choice between the public school and private tutors, by all means let us have the former with all its faults; but if possible let us have both together. When children are very young, mothers are their best teachers, and governesses are the mothers' best substitutes. When they grow older the public school should be their goal. Our candid opinion is that, thenceforth until they emerge from the universities, private tuition (if it can be procured) should go hand in hand with public education—the former being secondary to the latter. Such also is the opinion of several eminent educators whom we have consulted concerning this matter. Parties availing themselves of the advantages of both systems will not regret their conduct. At all events they will be acting prudently, and “prudence is said to be the foot-print of wisdom.”

I. Papers on Practical Education.

1. SCHOOL-ROOM ILLUSTRATION.

In the present article, a few experiments illustrative of the more important “Properties of matter” will be described. It will be convenient in performing these, as well as many other experiments, to have a few *glass vessels*; those commonly called beaker glasses, arranged in nests of capacity from one to three ounces, and from one pint to a half gallon, will be most suitable. Some quart specie jars, and a dozen test tubes will also be of great utility. In the absence of such vessels, use tumblers, canning jars, etc.

1. *Impenetrability*.—Take a glass vessel of the largest size half full of water, place upon this a piece of wood and press an inverted glass jar into the water. It will be observed that the wood sinks, and that the water rises in the outer jar, but not in the inverted jar. Substitute for the wood a candle about an inch long arranged on a small piece of wood to float it; light the candle and press the inverted jar down quickly over it; the candle remains burning, which proves conclusively that the air prevents the water from rising.

2. *Inertia*.—The inertia apparatus usually consists of a short wooden pillar about an inch in diameter, with a spring arranged beside it. On the top of the pillar is placed a card, on this a ball, the card is then struck by the spring and driven out so quickly that the ball, in consequence of its inertia, remains. Make a support of the two fingers and thumb of the left hand, on this place a card and a penny; strike the card horizontally with the middle finger of the right hand; it will fly out, and the penny will be left upon the fingers. A little practice will soon enable the experimenter to use but one finger for the support.

3. *Divisibility*.—Into a quart of water place one grain of nitrate of silver and a small quantity of common salt. A white precipitate of the chloride of silver will be formed, and render turbid the whole of the water. The grain of nitrate of silver has probably been divided into millions of parts. This property is also beautifully shown by using one grain of prussiate of potash with either muriate of iron or sulphate of copper. If Indigo or “blue” can be obtained more easily than the chemicals, an exceedingly small quantity of this substance will color several gallons of water.

4. *Porosity*.—Fill a small vessel with alcohol, and then place gently into it a large quantity of cotton, without permitting the alcohol to overflow. The cotton is supposed to occupy the spaces between the particles of alcohol. A vessel may be filled with water, and then a considerable portion of salt and afterwards sugar may be added; as into a bucket of apples, a number of peas and then some clover-seed can be placed.

5. *Expansibility*.—A thermometer, which should be in every school room, admirably illustrates the expansibility of mercury or alcohol. To hasten the expansion and contraction, breathe upon the bulb, and let the pupils observe the height of the liquid, then place the bulb in cold water, and indicate the difference.

6. *Elasticity*.—A piece of India rubber, an old watch-spring, a bow or the boys' play-ball will show that, when the particles are disturbed, either by blows or pressure, they will tend to resume their original shape.—*John G. Moore in Pennsylvania School Journal.*

2. TWELVE METHODS OF TEACHING SPELLING.

Spelling is usually considered a dry and uninteresting study, and many a teacher gives a sigh of relief as he dismisses his last spelling

class for the day. But this exercise is not necessarily stupid; it requires, like everything else in life, variety to give it spiciness, and this may easily be secured.

1st. One of the best methods of teaching spelling is to have each pupil write the words of the lesson in a book designed for the purpose, or upon his slate. The advantages of this method are obvious. Each pupil spells every word in the lesson. Many persons in spelling a word orally, will give it correctly, but when writing the same word will spell it incorrectly. I have found in my own experience that many pupils, whose books denoted incorrect spelling, would make no mistakes when called upon to give the words orally. As, during our whole lives, we spell words more by writing than in any other way, the desirableness of learning to write words correctly is readily seen. This method may be used in all schools and in all grades of schools.

In the primary department, the little ones can print the words if they do not know how to write.

But perhaps some teacher will say "I have no time to correct these lists of words, for every hour is too full already." This need not necessarily devolve upon the teacher. Each school may be divided into divisions, and the leaders of these divisions may be collectors and correctors. In the primary classes, the slates can be corrected during the exercises, either by a pupil or by the teacher.

2nd. Another excellent way is to have the words of the lesson placed in sentences or phrases. In this method the meaning and the right use of the words are brought out. Care should be taken that the sentences do explain the word to some extent. If the word *besieged* was in the lesson, and the sentence written should be, "It is besieged," no advantage would be gained by the exercise; but the expression "The besieged city was captured" gives some idea of the meaning of the word. The exercise should be conducted in writing.

3rd. In connection with writing, it is well to have some portion of the school spell the words orally, giving definitions and derivations. Many times the definition of a word may be known from its derivation, and if the meaning of one word, formed from a certain root, is known, the meaning of all words formed from that root may be approximately inferred.

4th. Concert spelling has some advantages. Volume of tone is thus secured and confidence is gained. But mistakes are not readily detected in this method and it should not be used to the exclusion of other and better ones.

5th. One kind of concert spelling is to have each division of a school give one syllable, the whole school or class pronouncing the word. This secures attention and will do occasionally, for variety's sake.

6th. It is well, sometimes, to give a lesson upon synonyms. The synonymous words should be expressed in sentences, that the fine distinctions may be understood and appreciated.

7th. Phonetic spelling, or giving the sounds of each letter, is a good exercise if the pupil is inclined to indistinct pronunciation. This method is sometimes employed successfully when the child is first learning to spell, but should be used with care.

8th. One of the best methods to secure attention is the following: Pronounce a word to a class and have each member, in turn, give one letter of the word. To do this well and as it would be given by one person alone, requires close attention.

9th. Another similar method is called "Matching Words." The teacher gives out a word to one member of the class, and he assigns to the next a word the first letter of which shall be the same as the last letter of the preceding word. In order that this exercise may be successfully conducted, promptness and quick thinking are requisite.

10th. It is sometimes a good way for a teacher to assign as a spelling lesson, all the words in a certain number of paragraphs in the reading book; then, when the time for recitation comes, let the teacher read from the book, and pause at the words he wishes the pupils to write.

11th. One of the most interesting methods is called "Illustrated Spelling." I will illustrate this method. Suppose the pupil has the word *icicle*. He would first present the object and then say "I have here a pendant mass of ice, formed by the freezing of water as it flows down an inclined plane or drops from anything. The name of this object is derived from two Danish words, one meaning ice and the other cone. The name is icicle. Spell and define." A great deal of useful information is given in this exercise and when the words are well selected it cannot be surpassed in interest.

12th. It will not do wholly to ignore the good, old-fashioned way of "choosing sides." Many of us can remember earnest but pleasant contests for "our side" in the old red school houses, which, we are thankful to say, are institutions of the past. Let us

allow our pupils occasionally to "choose sides," if for no other reason, for the sake of "auld lang syne."—*Ella S. Smith in Connecticut School Journal.*

3. "LET NATURE BE YOUR TEACHER."

The natural sciences have never received their share of attention in our common schools. The order of studies are so arranged (or confused), that, like the utility people of the stage, though very necessary to the play, are seldom able to inspire the house with any great enthusiasm.

Now the craft all agree that the concrete should precede the abstract; and, if ever, certainly, when the child-mind is receiving its first unfoldings. If ever that philosophy is indispensable, it is in the primary school. "Give the mind food suitable to its capacities" is a truism harped by educators, too many of whom, like guide-boards, forever point the way, but never go themselves.

Now the operations of a child's mind can never be forced, at first, in any direction, but it may be *induced*. The mind must first be led through flowery paths, to give it the desired inspiration, the thirst for excellence.

Show it, at least, the *spires* of the distant city, if you ever expect it to enter therein. Set not the path too thick with thorns; enough will be encountered in the later journey, when the paths leading through duty and inclination shall coincide,—a result of this same early training,—and incentives have resulted in noble resolutions to grapple with the most disheartening obstacles.

"Discipline?" Oh yes, that word we have heard before; it is used occasionally as the "first, secondly and lastly" of arguments by some who, willfully or otherwise, continue to misunderstand the whole tenor of arguments urged for the natural order of studies and their philosophical presentation. It is in behalf of a true discipline that we appeal for just this thing. The study of the natural sciences, directed by a teacher, calls out the *brain, eye and hand* to their best and most delicate performance, and, while disciplining, training the pupil to arrange, classify, reason, judge, they people every hour of task with sweet and innocent shapes, that "glide into" their "inner musings."

Their introduction into the *lowest* grades is *practical*, and leads the pupil, be he ever so young, at once among organizations and laws that will ever be to him a discipline and a delight. If you are educating for *time*, they are *preëminently* practical, imparting information concerning the furniture of our physical abode. If you are educating for eternity, faith lays hold on a firmer foundation, through suggestions and proofs numberless of the First Great Cause. We know it is their province to catch us up while pondering over the tangible of earth, to a new atmosphere within the calm chambers of meditation, from which the world recedes and drops off into silence. There is *use* in them, and that, too, in the primary school. Their alphabet is as simple as the alphabet of the mother tongue, and appeals more directly to the perceptive faculty. Our order of studies is too much like some chimneys, built bottom up, giving the pupil, after being thoroughly disgusted with study in the abstract and books in the concrete, an invitation to enter the charming realms of the natural sciences. Only a few nibble at the bait, still less are caught.

God never designed that his "of such is the kingdom of heaven" should be met with crosses from A B C to cube root. There may be no royal road to learning, but a pretty good highway is being opened up over the Delectable Mountains of the natural order of studies. I glory in the sincerity of that English divine who said, "Work that is performed for some noble end is noble; but work for the sake of work alone, is no more noble than is the Hindoo penance of swinging on the hook." Nor does this idea degrade labor, but consecrates it to noble ends.

We have said the scientific course should commence with the first week in school; nor should it cease with the lower grades. As the pupil stops not at his alphabet, or learning to trace the hand of the Divine while studying his works, so lead him on and up, increasing in strength and appreciation of the true, the beautiful, and the good, until the infinity of science shall open before him, luring him into the paths of wisdom, that "shall bring him to honor when he doth embrace her."—A. A. W., in *Maine Journal of Education.*

II. Papers on Habits of Study.

1. OVER STUDY BY CHILDREN IN SCHOOL.

The *Boston Journal* says:—Two hundred and three parents and guardians directly interested in the matter, sixty-five clergymen and one hundred and fifty-three physicians of this city, have signed a petition to the School Committee to release the pupils at the Public Latin School from all studies on Saturdays, with the exception of

the one in each month set apart for public exercises. The request is not only a reasonable, but an eminently wise one, and supported as it is by the testimony of many of our most distinguished citizens, should be complied with. The students in the institution in question are probably worked harder, and have less time given them for recreation, than those of any preparatory school in the country. The curriculum is a severe one, and not only are the daily sessions unusually long, but the pupils are required to devote three hours to study after the close of each day's school labors. The result of this certainly injudicious system of management cannot but be unsatisfactory in the extreme. No good end is, or can be observed. A boy though capable of doing and standing an innumerable number of remarkable things, has a large amount of humanity about him after all, and there is a limit even to his powers of endurance. Naturally fond of excitement and averse to monotony, it is not in his nature to thrive under a regime that practically keeps him tied down to his books during the best part of every working day in the year. Educators, as a rule, have recognized this fact long ago, and learned to appreciate that the old-time method of "cramming" is rarely successful, except so far as it tends to drive out of a student's head whatever valuable knowledge it may have previously possessed. At the Boston Latin school the course really provides for eight hours of actual study every day in the week, excepting of course, the Sabbath. Add to this the time occupied in preparation for school and in journeying between home and the institution, and but a very narrow strip of time before bed-time will remain. Parents testify that, as a matter of fact, this tax upon their children injures them physically and mentally.

2. HARD STUDY KILLS NOBODY.

Thought is the life of the brain, as exercise is the life of the body. There can be no more such a thing as a healthy brain, as to the mental department, without thought, study, than there can be a healthful body without exercise. And as physical exercise preserves the body in health, so thought, which is the exercise of the brain, keeps it well. But here the parallel ends; we may exercise, work too much, but we cannot think too much, in the way of expressing ourselves, for both writing and talking are a relief to the mind; they are in a sense its play; its diversion. Bent up thoughts may kill, as pent up steam wrecks the locomotive. The expression of thought is like working off the steam from the boiler. When clergymen break down, or public men, or professors in colleges, or other literary institutions get sick and die, the universal cry is, "over study," "too much responsibility," "too much mental application." It is never so; not in a single case since the world began; we defy proof, and will open our pages to any authenticated case. If a man will give himself sleep enough, and will eat enough nutritious food at proper intervals, and will spend two or three hours in the open air every day, he may study, work and write, until he is as gray as a thousand rats, and will be still young in mental vigor and clearness. Where is the man of renown who lived plainly, regularly, temperately, and died early?—*Hall's Journal of Health.*

3. WHAT IS IT THAT KILLS?

In the school, as in the world, far more rust out than wear out. Study is most tedious and most wearisome to those who study least. Drones always have the toughest time. Grumblers make poor scholars, and their lessons are uniformly "hard" and "too long." The time and thought expended in shirking would be ample to master their tasks. Sloth, gormandizing and worry kill their thousands where over-study harms one. The curse of Heaven rests on laziness and gluttony. By the very constitution of our being they are fitted to beget that torpor and despondency which chill the blood, deaden the nerves, enfeeble the muscles, and derange the whole vital machinery. Fretting, fidgeting, ennui, and anxiety, are among the most common causes of disease. * * *

* * * On the other hand, high aspiration and enthusiasm help digestion and respiration, and send an increased supply of vital energy to all parts of the body. Courage and work invigorate the whole system, and lift one into a purer atmosphere, above the reach of contagion. The lazy groan most over their "arduous duties," while earnest workers talk little about the exhausting labors of their profession. Of all creatures, the sloth would seem to be most wearied and worn.—B. G. NORTHROP.

III. Papers on Education in Various Countries.

1. EDUCATION IN SWEDEN.

The Swedes and Norwegians are the most universally educated people in the world. Up to the year 1828 education was sustained by

fees, and its direction was local. In the year named, Nils Manson, a peasant, introduced a bill into the Swedish Diet for the regulation of education, which was strenuously opposed. The House of Peasants urged the measure for ten years before the Government moved in the matter, and then the Bishops entered their protest. The poet and bishop, Tegner, said that "the culture of the laboring classes ought principally to be religious; this, if rightly imparted, includes morality. All other knowledge is to be regarded as not only needless, but more hurtful than beneficial." Yet three years after these words were spoken the present school system was in operation. The law was passed in 1842, and it provided that one folk school must be maintained in each Sochen, both in the city and country. There were in Sweden in 1868, of children between five and fifteen years, 699,128, and of these no less than 526,646 were in attendance on the folk schools, and 141,541 attending other schools or being instructed at home, making 658,187 in all, or 97 per cent. of the whole population of school age. This is a larger proportion than can be shown in any other country in the world. The branches taught in the folk schools are reading, writing, Biblical history, catechism, arithmetic, history, geography, grammar, geometry and linear drawing, singing, gymnastics and horticulture. The study of and exercise in military tactics is made obligatory upon every boy, and, in both the folk schools and higher schools, target practice is introduced. This feature of the Swedish educational system is found to work well, and it is training the whole population to the use of arms. It is a system which cannot be too strongly commended. The schoolhouses are mostly small structures, built at an expense of about \$2,000 each, and each capable of accommodating about 150 scholars. School libraries are established by law, and there are about 1,300 in Sweden. In Norway the law differs somewhat from that in Sweden, but education is compulsory, the parents being fined in case of neglect to send their children. Military instruction is not yet obligatory, but the indications are that it soon will be. The age of compulsory attendance is from eight years till confirmation, which generally takes place about the fifteenth year. As a rule primary education is free, but when the parents are able to pay they may be called upon to do so. It is probable that our new school law will follow the example set it in Scandinavia, by making attendance compulsory. We would be very well pleased if it should follow that example a little further and provide for the military training of the boys. That is a mode of providing for the public defense whose simplicity, efficiency and economy must commend it to every reflecting mind, and yet we persist in spending large sums on an excellent, certainly, but less valuable system, to the utter neglect of this.—*Hamilton Spectator.*

2. POPULAR EDUCATION IN EUROPE AND AMERICA.

The following editorial article appeared in *The Press* of Philadelphia. It is especially valuable for its exposition of the character of our American systems of education in contrast with that of the most prominent systems of the Old World. Let it be read with the attention it so well merits:

The fourth of the series of great international convocations, for the purpose of comparing notes of social progress, was the Paris Exposition of 1867. The previous occasions of this character had illustrated the fact that those nations which had enjoyed the largest and freest access to the treasures of science and art were the most advanced in physical development and in intellectual and moral power. Intelligence and prosperity were shown to be not merely casual associates, but the necessary correlatives and complements of each other; in fact, sustaining the relation of cause and effect. Enlightened by the results of the previous occasions of this character, the managers of the great Exposition at Paris in 1867 were induced to set apart on that occasion, a grand division designated with great felicity "the Department of Social Science." A "New Order of Recompenses" was created, constituting Group X of the subjects of the Exposition, "with a special view to the amelioration of the moral and physical condition of populations." At the head of this group, in the general catalogue of the Exposition, were placed classes 89 and 90, constituting its educational branch. The number of exhibitors in this department was considerably over a thousand, but from the fact that their subjects were mostly embraced under other heads, their exact number could not be definitely ascertained. Our country was largely represented in this noble work.

The separate objects of exhibition themselves numbered many thousands, illustrating the whole range of the educational work from the material appliances of the infant school to the scientific apparatus of the university. In the park outside the Crystal Palace were erected school-houses fully furnished for use, illustrating the methods of practical instruction. Separate pavilions embraced illustrations of the course of study and methods of

instruction in schools of agriculture, mining and mechanical industry. In the Palace itself, numerous halls and alcoves were filled with charts, maps, text-books, globes, &c. In fact all the different elements of the grand educational movement of the age seem to have been represented in some part or other of the Exposition, affording a rare opportunity to test the mental and moral progress of our race.

The appreciation of the peculiar excellencies of different nations was indicated by a series of prizes, embracing, first, honorable mention; second, bronze medals; third, silver medals; fourth, gold medals; and fifth, grand prizes. The highest rank of excellence, indicated by grand prizes, was attained only by two Republics, the United States and Switzerland. This, considered in connection with the small number of her exhibitors in all departments of the Exposition, indicates the pre-eminence, in higher civilization, which free institutions have already secured. In the massive educational establishments of the great powers of Europe, organized, supported and enforced by authority, using the physical resources of great nations, there were exhibited some results which, of course, the limited powers of popular government could not attain. But for those nobler elements of intellectual progress, which indicate and establish the leadership of civilization, it is found that popular freedom is the most genial inspiration.

The grand difference between the educational systems of Europe and America lies in system. In the older countries of the world everything, sooner or later, settles itself down into a certain routine. This is claimed as a special advantage by the advocates of conservatism, ever ready to defend the abuses of vested interests. It is admitted that for many of the purposes to be attained by schemes of popular education, a well settled system is of prime necessity, although that system may embrace many erroneous principles, and may be embarrassed by many defects of application. But the experience of European nations seems to demonstrate that mere system may be pushed to extremes. By hardening into inflexible grooves, a machinery of education may prove to be a restraint upon the free development of popular intelligence, and, to a greater or a less extent, an impediment, of real civilization and progress.

European educational systems are especially open to this criticism. The great problem of those mediæval governments is to yield such limited compliance to the spirit of the age as will enable them still to maintain their power. The enlargement of popular ideas and the extension of popular intelligence being fixed facts, the policy of the ruling powers lies in controlling their development as far as possible. Hence education has been made both a State and a Church institution to an extent which we republicans would not tolerate in this country. We are able, however, to appreciate with sufficient accuracy the reasons of this centralization of popular thought around existing institutions. We know that vested interests would be imperilled by the emancipation of the popular mind from prejudices favorable to the perpetuation of present abuses. Hence the anxiety of the powers that be to impress upon the young mind of the nation such a reverence for existing social order as will secure their own hereditary emoluments. From systems of popular education devised by such authorities, and with such narrow views, though we are prepared to expect special cultivation of specific faculties, we have no reason to look for any broad or genial development of the mind as a whole. The great effort is to educate the rising generation into obedient subjects of monarchy.

These systems are ably presented by Commissioner Hoyt in his report on the educational department of the Paris Exposition. The French system is like other departments of French thought and enterprise, daring and comprehensive. It contemplates a wide range of instruction, embracing every grade of advancement from the primary school to the university, but it is open to objection on the score of impracticability in many of its features. It is also seriously crippled by the excessive centralization of the French political system. The Prussian system, on the other hand, is less demonstrative, but it exhibits the same massive and powerful organization which has given such sweeping and unexpected successes to the Prussian arms in the war now raging. The other German States are remodelling their systems upon that of Prussia. Those of the Latin races in the southern peninsula of Europe are following the line of general action of the Teutonic nations, but have not as yet developed very striking results.

The Swiss educational system, however, presents a remarkable analogy to our own, and both, in the monarchies of Continental Europe, are stigmatized as the absence of system. In the United States and in Switzerland, the local machinery of education is in the hands of the people, and hence its administration presents a great variety of efficiency growing out of the different capacities of local communities to manage it. The local directors are elected by the tax-payers and school patrons in each district, while the

general management of each canton or state lies in the state or cantonal government, not in the general government. Critics imbued with the conservative prejudices of monarchy, and fascinated by the imposing but superficial results of the centralized establishments of Europe, are disposed to a captious contempt for a free-popular system. We can afford to admit, for the satisfaction of these gentlemen, that there are disadvantages at the outset which are not so readily overcome by the latter as by the former. But the enlarged experience of mankind has shown that those results which are the most speedily attained are not the most permanently advantageous.

European systems contemplate the cultivation and polish of specific faculties. The popular systems of Switzerland and the United States aim at the development of the whole mind and the quickening of the sentiment of free manhood. The former having thus narrowed its sphere, it is not at all wonderful that it has the sooner attained its maximum of results. The latter, having embraced wider and nobler aims, must await the ripening fruits of its labors in the glorious future. In spite of classical and scientific learning, and in spite of superior effectiveness in some of the processes of training, our free-popular education will sooner or later produce results that will overshadow the grandest achievements of the European systems.

3. COST OF SCHOOL EDUCATION.

There is nothing in which the States of the Union differ from each other more than in the adequacy of the provisions made for the instruction of children and the efficiency of their school systems. The following table shows the sum of money expended for education in each State, for each child of "school age."

School Expenditures per head of the School Population.

Nevada	\$19 17	Wisconsin	\$4 98
Massachusetts	16 45	Maine	4 78
California	11 44	Maryland	4 50
Connecticut	10 29	New Hampshire....	4 46
Pennsylvania	7 86	Arkansas	3 97
Illinois	7 83	Louisiana	2 84
Iowa	7 21	Delaware	2 70
New York	6 83	Missouri	2 65
Vermont	6 47	Nebraska	2 65
Kansas	6 45	Indiana	2 37
Ohio	6 48	Alabama	1 49
Michigan	6 40	Tennessee	91
New Jersey	6 38	Florida	91
Rhode Island	6 20	Kentucky	73
Minnesota	5 71	North Carolina	48

The average attendance in the schools of the whole country is, 3,377,069, while the average number of children of school age absent from school is 4,843,568.

4. TOO PREVALENT SUPERFICIAL EDUCATION.

Gen. Schriver, inspector of the United States Military Academy at West Point, in his annual report, speaks as follows of the prevalent system of education:—

"The results of the late examination have, with greater force than ever before, directed the attention of the Academic authorities to the utterly superficial system of education seemingly prevalent throughout the country. It is no longer unusual or surprising to find candidates rejected at West Point for deficiency in the primary branches of a common school education, possessed of diplomas from reputable seats of learning, attesting their proficiency in many kinds of knowledge. Though the requirements for admission are certainly not beyond the capacity of an ordinary pupil of the common schools old enough to receive a cadet appointment, it is doubtful whether a tithe of the vacancies at the Academy could be filled without the one year's preparation for examination provided for by law."

5. AN EDUCATIONAL WARNING TO US.

The following extract from an article written for the London *Fortnightly Review*, by Emile de Laveleye, indicates with startling clearness the cause of the downfall of France:—

"The most formidable corps in the French armies was, it used to be said, the Turcos and the Zephyrs. They met men in spectacles, coming from universities, speaking ancient and modern languages, and writing on occasion letters in Hebrew or Sanskrit. The men in spectacles have beaten the wild beasts from Africa. In other words, intelligence has beaten savagery. Are we to be

surprised at this, when we know that war, like industry, is becoming more and more an affair of science?

"Who does not know the immense sacrifices that Germany has made for the advancement and diffusion of knowledge—spending for instance, twenty thousand pounds sterling at Bonn on a chemical laboratory? Little Wurtemberg devoted more money to superior instruction than big France. A thing unheard of, France made the very fees of the university students a source of revenue. She gave, without counting it, more than a couple of millions of pounds sterling (between fifty and sixty million francs) for the new opera, and she refused forty thousand pounds for school buildings. Last year, on the deck of the steamer which was conveying us to the inauguration of the Suez Canal, M. Duruy, the one man of merit who ever served under the Imperial Government, told me the tale of his griefs in the ministry of Public Instruction. He wanted to introduce compulsory education; the Emperor supported him; he had all the other Ministers against him. He had organized fifteen thousand night schools for adults; it was with difficulty that he succeeded in carrying off forty thousand pounds against the fatuous resistance of the Council of State. There was the whole system of public instruction to re-organize, and he could get nothing. They preferred to employ the gold of the country in maintaining the ladies of the ballet, in building barracks and palaces, in gilding monuments, the dome of the Invalides, the roof of the Sainte Chapelle. It was in vain that men like Jules Simon, Pelletan, Duruy, Jules Favre, cried out, year after year, "There must be millions for education, or France is lost." The government was deaf. It denied nothing to pleasure, to luxury, to ostentation. It denied everything to education.—*Boston Era*.

6. NEW BASIS OF EDUCATION IN GERMANY.

At a great educational congress, recently held in Vienna, and attended by about five thousand educators from all parts of Germany, it was agreed that the principles of religion, but not the dogmas of any particular sect, should be taught in the national schools. They also agreed that the education of girls should be compulsory to the age of sixteen, and that they should be trained for various trades and professions.

7. PRUSSIAN AND FRENCH CONSCRIPTS.

There is a table showing the percentage of the Prussian conscripts who can neither read nor write as compared with the French. In the former it is 3.81, while among the latter it is 30.5, showing that in Prussia education is very general.

8. PROGRESS OF EDUCATION IN TURKEY.

A new public education law has been promulgated at Constantinople. Primary instruction is made compulsory for every inhabitant of the Turkish empire. The period of instruction for girls is fixed at from six to ten years of age, and for boys from six to eleven. The magistrates of districts and villages are to keep a register of the names of the boys and girls whose age qualifies them for instruction, together with those of their parents or guardians. If any of these do not go to school, the magistrate is to warn the parent or guardian of his obligation, and if, after such notice, the child is not sent to school within a month, and no valid reason is given for its absence, a fine of from 5 to 100 piastres is to be imposed according to the means of the parent, and the child is to be taken to school by the authorities. * * * The primary schools are to be either Mussulman or Christian, according to their religion which is most prevalent in the district. The higher schools, however, are to receive *Mussulmans and Christians indiscriminately*. "An Imperial Council for Public Instruction" has been established to see to the due execution of this law.

IV. Biographical Sketches.

1. GEORGE RIDOUT, Esq.

Mr. George Ridout, the oldest barrister of Upper Canada, was a son of the late Hon. Thos. Ridout, Surveyor-General of Upper Canada. He was born in Montreal, but removed with his father's family to Toronto, then "Little York," and was educated at Cornwall, at the late Bishop Strachan's school. He studied law in this city, and rose in his profession; and was, under the government of Sir P. Maitland, appointed Judge of the Niagara District Court; afterwards he resumed the practice of his profession, and was for many years a leading member of the Toronto Bar. He was one of the founders of the Law Society, and one of the oldest on its list

of Benchers. He served under General Brock during the war of 1812, and afterwards received a commission as Colonel of the East York militia.

2. JOHN McNAB, ESQ.

Mr. McNab, County Attorney, was about fifty years of age. A native Canadian of Scotch parentage, he was born in Trafalgar, County Halton, and became an attorney in June, 1848, and was admitted to the Bar in Hillary Term the following year. In 1862 he received the appointment of County Attorney, succeeding Mr. Richard Dempsey. Wherever John McNab was known, he was appreciated as a warm-hearted friend, genial and kind in his manners to all.

3. J. W. GILMOUR, ESQ.

John Walker Gilmour was born in Aberdeen, on the 3rd day of May, 1823, and was the only child of the Rev. J. Gilmour. When 7 years of age, his father, having received an invitation to come to Montreal, sailed for that place in the autumn of 1830, and in due course arrived there, where he lived for six years, during which period the younger Mr. G. attended school. In the fall of 1837 he removed with his father to Peterboro', and shortly after went to Brockville to pursue his education, which was completed in Edinburgh. After returning from Scotland he had some idea of pursuing the mercantile business, and went to St. Catharines for that purpose, but becoming very ill there, on his recovery he returned to Peterboro'. His father having subsequently purchased the present homestead, Mr. G. turned his attention to clearing and improving it, and seemed much pleased with the rough and onerous task. In addition to the farm he started a nursery, to which he devoted a great deal of attention and expense, and, although he brought it to a good state of efficiency, it somehow failed to return him anything commensurate to the skill, labour and expense bestowed upon it. In 1852 he was elected a member of the Township Council of North Monaghan, and continued a member for the five succeeding years. In 1864, he was elected Reeve, and held that office for three years. On the occasion of the death of the late Reeve, Mr. George Young, Mr. Gilmour was again chosen Reeve, and was re-elected in January last.

4. ROBERT CHAMBERS, LL.D.

Robert Chambers, the Edinburgh publisher, was born at Peebles, Scotland, in 1802, and in early youth, with his brother William, was abandoned to his own resources. The brothers received an elementary education, and established in Edinburgh two book-stores, William adding to his a small printing establishment. Robert's taste led him to write, and, in 1824, he published the *Traditions of Edinburgh*, in 1826 the *Popular Rhymes of Scotland*, and in 1827 *Pictures of Scotland*. Then follows the *Life of James I.*, in two volumes, *Scottish Songs and Ballads*, and *History of the Rebellion in Scotland*. In 1832 the two brothers united their fortunes, and soon took rank among the first editors of London and Edinburgh. William wrote a *Guide to Scotland*, and founded *Chambers' Edinburgh Journal* soon afterwards, which since 1854 has been known as *Chambers' Journal*, and in 1863 had attained a circulation of 200,000. Their success led them to publish cheap works for popular instruction, among which were *Information for the People*, *The Educational Course*, and later, *The Cyclopedia of English Literature*, *English Classics*, *Repository and Miscellany of Tracts*, *Library for Young People*, *Papers for the People*, and others. They were the pioneers of cheap literature in Great Britain. In addition to the works named above, Robert Chambers produced *Lives of Illustrious Scotsmen*, *Vestiges of the Natural History of the Creation*, the latter appearing without the name of the author, in the form of *essays* in the periodical press, and with his brother, compiled a history of the Crimean War.

V. Papers on Farming.

1 THE SEED,—SPRING.

BY R. S. P.

When in the dark, imprisoning ground,
The seed lies waiting for its hour,
Within a narrow cell fast bound,
Yet conscious of an inward power,
I know that it must cherish there
Dim longings for the upper air;
Dreams of a life more free and fair;
Foregleams of leaf and flower.

And when at last the word goes forth,
 And its frail covering falls apart;
 And, rising upward from the earth,
 A new life thrills through every part,—
 The great sun greets it with a smile,
 And the soft airs of spring the while
 Its unexpanded leaves beguile
 From out their buds to start;

While over it, a sheltering tent,
 The warm sky bends by night and day;
 And at its feet, in sweet content,
 The brook goes singing on its way;
 And, lifting up its head, it sees
 The lofty over-arching trees,
 And feels itself akin to these
 With silent ecstasy.

How like a dream must seem the strife
 And longing of its stay below!
 How brief the struggle of that life,—
 Its days of waiting long and slow!
 How strange and sweet the sudden bliss
 That the dark way could lead to this!—
 I think I now can dimly guess;
 But one day I shall know.

From the Magazine *Old and New*.

2. \$100,000,000 LOST TO FARMERS BY INSECTS AND BY THE FOOLISH DESTRUCTION OF BIRDS.

Horace Greeley, in deprecating the wilful destruction of birds by farmers, boys, and others, thus warns them of the loss incurred by the foolish bird warfare:—

If I were to estimate the average loss per annum of the farmers of this country from insects at \$100,000,000 per annum, I should doubtless be far below the mark. The loss of fruit alone by the devastations of insects, within a radius of fifty miles from this city, must amount in value to millions. In my neighbourhood, the peach once flourished, but flourishes no more, and cherries have been all but annihilated. Apples were till lately our most profitable and perhaps our most important product; but the worms take half our average crop and sadly damage what they do not utterly destroy. Plums we have ceased to grow or expect; our pears are generally stung and often blighted; even the currant has at last its fruit-destroying worm. We must fight our paltry adversaries more efficiently, or allow them to drive us wholly from the field.

Now, I have no doubt that our best allies in this inglorious warfare are the birds. They would save us, if we did not destroy them. The British plowman turning his sod with a myriad of crows, blackbirds, &c., chasing his steps and all but getting under his feet in their eager quest of grubs, bugs, &c., is a spectacle to be devoutly thankful for. Whenever clouds of birds shall habitually darken our fields in May and (less notably) throughout the summer months, we may reasonably hope to grow fair crops of our favourite fruits from year to year, and realize that we owe them to the constant and zealous, though not quite disinterested, efforts of our friends, the birds.

But I do not regard the ravages of insects as entirely due to the reckless destruction and consequent scarcity of our birds. I hold that their multiplication and their devastations are largely incited by the degeneracy of our plants caused by the badness of our culture. On this point, consider a statement made to me some fifteen or twenty years ago, by the late Gov. William F. Packer of Pennsylvania:—

"I know (said Gov. P.) the narrow valley of a stream that runs into the west branch of the Susquehanna, which was cleared of the primitive forest some forty or fifty years since, and has ever since been alternately in tillage and grass. A road ran through the middle of it, dividing it into two narrow fields. A few years ago this road was abandoned, and the whole of this little valley, including the roadway, thrown into a single field, which was thereupon sown to wheat. At harvest time, this remarkable phenomenon was presented: A good crop of sound grain on the strip four or five rods wide formerly covered by the road; while nearly every berry on either side of it was destroyed by the weevil or midge."

Now I do not infer from this fact that insect ravages are wholly due to our abuse and exhaustion of the soil. I presume that wheat and other crops would be devastated by insects if there were no slovenly, niggard, exhausting tillage. But I do firmly hold that at least half our losses by insects would be precluded if our fields were habitually kept in better heart by deep culture, liberal fertilizing, and a judicious rotation of crops. I heard little of insect ravages in the wheat-fields of Western New York throughout the

first thirty years of this century; but, when crop after crop of wheat had been taken from the same fields until they had been well nigh exhausted of their wheat-forming elements, we begin to hear of the desolation wrought by insects; and those ravages increased in magnitude until wheat culture had to be abandoned for years. I believe that we should have heard little of insects had wheat been grown on these fields but one year in three since their redemption from the primal forest.

But, whatever might once have been, the Philistines are upon us. We are doomed, for at least a generation, to wage a relentless war against insects multiplied beyond reason by the neglect and short-comings of our predecessors. We are in like condition to the inhabitant of the British Isles a thousand years ago, whose forefathers had so long endured and so unskillfully resisted invasion and spoliation by the Northmen that they had come to be regarded as the sea-kings' natural prey. For generations it has been customary hereabout to slaughter without remorse the birds, and let caterpillars, worms, grasshoppers, &c., multiply and ravage unresisted. We must pay for past errors by present loss and years of extra effort. And, precisely because the task is so arduous, we ought to lose no time in addressing ourselves to its execution.

The first step to be taken is very simple. Let every farmer who realizes the importance and beneficence of birds teach his own children and hirelings that, except the hawk, they are to be spared, protected, kindly treated, and (when necessary) fed. They are to be valued and cherished as the voluntary police of our fields and gardens, constantly employed in fighting our battles against our ruthless foes. The boy who robs a bird's nest is robbing the farmer of a part of his crops. He who traverses a farm, shooting and mangling its feathered sentinels diminishes its future product of grain and nearly destroys that of fruit. The farmer might as well consent that any strolling ruffian should shoot his horses or cattle as his birds. Begin at home to make this truth felt and respected, and it will be the easier to impress it also on your neighbours.

Next, there should be neighbourhood or township associations for the protection of insect-eating birds. We must not merely agree to let them live—we must cherish and protect them. I believe that very simple cups or bowls of cast-iron, having each a hole in its centre of suitable size, that need not cost sixpence each, and could be fastened to the side of a tree with one nail lightly driven, would in time be adopted by many birds as nesting strongholds, whence they might laugh to scorn their predacious enemies. If every harmless bird could build its nest among us in a place where its eggs would be safe from hawks, crows, cats, boys, and other robbers, the number of such birds would quickly be doubled and quadrupled.

And we must summon the law to our aid. Though law can do little or nothing against stealthy, skulking nest-plunderers, it can help us materially in our warfare with the cowardly vagabonds who traverse our fields with musket or rifle, blazing away at every unsuspecting robin or thrush that they can discover. Make it trespass, punishable with fine and imprisonment, to shoot on another's land without his express permission, and the cowardly massacre of the farmers' humble allies would be checked at once, and, when public sentiment had been properly enlightened, might in civilized regions be arrested altogether.

3. THE GREAT USE OF BIRDS TO FARMERS.

Mr. H. Bruce thus writes to the London *Free Press* on this subject:—

The farmer who allows any person to kill the small birds about his place is sadly wanting in the feelings of a man of generous thought, and sound judgment; and if he permits these birds to be destroyed because they deprive him of a few of his cherries and green peas, he, to use the vulgar phrase, "saves at the spigot and loses at the bung." Careful experiments have shown that every robin consumes, during the year, fifteen lbs. of worms. Think of that, every farmer who complains of the robin or any other small birds, for they all eat in proportion. The thousand birds which surrounds your farm and homestead during the year, bringing joyful welcome to your senses morning and evening, with their sweet notes, and songs of love, do they not remind you of the Great Creator, of the Almighty One, whose tender care is ever for these little birds; and only fancy these thousands of small birds that surround your homes eat annually 15,000 lbs. of worms and other insects. Now taking into account the vast good they do to the farmer, independent of their sweet melody, who, I say, is the deep thinking man with a generous mind that would permit the so-called sportsman, or the boy with the murderous gun, to destroy them, and particularly "out of season." Even the poor black crow, now so common amongst us, he is the harbinger of spring, and is useful in his way; it is not, however, to be denied that he pulls up a great

deal of corn, and gives a deal of trouble, but he does it not for mischief, but in his efforts to assist the farmer.

Every one knows the injury done to corn and other crops, by the wire or catworm. It is in pursuit of these grubs that crows and blackbirds pull up the young plants, at whose roots, instinct teaches them, their prey lies; and it will be found that the fields most haunted by crows are most infested by the grub and the worm. This I mention to show the real habits of the crow, and I think that we should meet with greater loss without his company. The following borrowed remarks show that robins and blackbirds are not the only consumers of worms:—A distinguished American naturalist mentions in his remarks respecting small birds, that one morning he saw the branches of a favourite tree overrun by many hundreds, of course, hairy black and red caterpillars, often seen on willows; that he was on the point of going out to remove them, when he saw a male catbird light among and begin to eat them, occasionally flying away with some for its young. The bird continued this all day. By the same hour on the next day there were no caterpillars to be seen on the tree; the catbird had cleared it. So of other birds; and the millions of pounds of grubs and worms eaten by these birds would, if unconsumed, devour every green thing. But it is not only the earth-worms, caterpillars and grubs that these small birds destroy, for even the wheat-midge is eaten by numbers of them, such as the swallow tribe, the whippoorwill, and many others, which catch their prey on the wing. These are also most useful to the farmer. There used to be in years past a very small yellow bird of the finch tribe, much smaller than the native wild canary; its chief food consisted of the worm of the wheat-midge; but of late seasons he has been very rarely seen. Many other useful small birds have entirely left this section of the country, and are only now seen in some of the museums. But the skunk, the marmot, or ground-hog, and many other animals which are really injurious, besides being a nuisance to the farmer, are held in the greatest abhorrence and shunned by those poachers of game and small birds "out of season." The fact is, farmers, you should not allow such poachers to set foot upon your property—indeed it is high time that an effective stop be put to such an unlawful practice; at all events, if you cannot give proof as to the destruction of game and small birds "out of season," you at least can have them arrested for wilful trespass. If all farmers and other land owners, where game and small birds resort in the breeding season, were strictly to attend to this advice, even for a few years, depend upon it both game and small birds would increase, as would also your crops of grain; and your fruit crops would be far more abundant and more free from disease. H. BRUCE.

4. THE ROBIN USEFUL TO FARMERS.

A correspondent of the *Toronto Globe*, deprecating the wholesale destruction of birds by boys, writes as follows:—

I beg to call the attention of farmers and others interested in the material prosperity of our country, to the wholesale manner in which multitudes of our most valuable insectivorous birds are annually destroyed.

Noxious insects and larva which grub in the soil are not killed by severe frost, as some affirm; they remain near the surface in mild weather, and descend to greater depths as the cold becomes more intense.

We must look to the birds alone to protect our crops from, probably, total annihilation.

The Canadian robin is, perhaps, our most useful unpaid *employee*; his musical talent is considerable, and, though a first-rate connoisseur of choice strawberries, it is only by way of dessert.

Two or three years ago a pair of robins built their nest in a low spruce tree in my garden; the nest was only five feet from the ground, and thus afforded every facility for observing their articles of diet. Every morning master Bob carried five or six slugs (*Limax agretis*, the gardener's most bitter enemy,) to his black-eyed darling, as she sat on the nest. After having provided her with breakfast, he would fly to a neighbouring oak, and sing most lustily for half an hour, to clear his throat for another feast of fat grubs, slugs, &c. In due time the eggs were gone, and a handful of fluff in their place; but a gyration motion of the finger and thumb made five large yellow mouths start up from the pile of fluff, all ready-made insect traps of the best possible description.

5. HUMANE EDUCATION IN REGARD TO ANIMALS.

I propose to speak briefly of a branch of education unknown to our public schools, yet it seems to me of such transcendent importance as to underlie all others. I mean the subject of Humane Education.

Every observer of children, indeed every teacher, must have

noticed that the manifestation of a cruel disposition crops out very early. It begins with pulling off the wings of flies and teasing the lower animals. It impels the youngurchin to look about him for a stone whenever he hears a lone bird singing on a twig, or sees a poor wandering pig by the wayside. It would, perhaps, be not easy to define very philosophically, or with any thing like psychological accuracy, how it is that children so often act with cruelty to the world of life around them. The poor crushed fly, the wretched, pelted kitten, the tortured toad with stomach filled with shot, the poor turtle either lying helpless on his back, or carrying upon it a burning coal, all rise familiarly enough to our memories as instances of this cruel, unthinking wantonness, this early and miserable misuses of our mysteriously given lordship over the creatures around us. These things, however, account for them as we may, exist, and most certainly lead onward to cruelty more or less deliberate in after life. For cruelty in the child, if unchecked, will most certainly lead to baneful results in the man.

Now, few things can be taught more easily, or learnt more readily, than tenderness and mercy to the animal world, if the teaching begins early enough, and is conducted in the right way. Give the child an insight into the habits and useful characteristics of some of the animals most immediately at the mercy of childish cruelty. Bring out the conception of each poor fluttering or crawling thing being an individual, having its own individual sufferings; and often showing its own pity-moving apprehensions; encourage the larger boys in our schools to write essays about kindness to animals; let the intellectual and humane be combined; have prizes for humanity as well as scholarship.

Were I to write a school-book for the young, I would place most prominently upon one of its pages Sterne's words to the fly, which we all read in our youth, and have often recurred to since: "Go, poor insect; get thee gone! Why should I hurt thee? This world is surely wide enough to hold both thee and me."—T. H. ROSE, in *California Teacher*.

6. HOW TO MAKE BOYS GOOD FARMERS.

The "American Agriculturist" says:—

"Induce them to take an interest in the farm, in the implements, in the stock; tell them all your plans, your successes and failures; give them a history of your own life and what you did, and how you lived when a boy; but do no harp too much on the degenerated character of young men of the present age; praise them when you can, and encourage them to do still better. Let them dress up in the evening instead of sitting down in their dirty clothes in a dining room. Provide plenty of light. Thanks to the kerosene, our country homes can be as brilliantly lighted as the gas-lit houses in the city. Encourage the neighbors to drop in evenings. Talk agriculture rather than politics; speak of the importance of large crops, of good stock, of liberal feeding, and of the advantage of making animals comfortable, rather than of the hard times, low prices, high wages. Above all, encourage the boys to read good agricultural books: Papers are well enough, but an intelligent boy wants something more. Get him some good agricultural book to study. Read it with him, and give him the benefit of your experience and criticism. When he has mastered this, buy him another. In our own case, we owe our love for farming principally to the fact that our father talked to us of everything that was doing on the farm; answering all the questions, and encouraging, rather than refusing, our childlike desire to help him to plough, to chop, to let off water, and fire the brush heap.

7. HOW GOOD FARMERS MAKE MONEY.

They keep account of farm operations.

They do not leave their farm implements scattered over the farm, exposed to snow, rain, and heat.

They repair their tools and buildings at a proper time, and not suffer a subsequent three-fold expenditure of time and money.

They use their money judiciously, and they do not attend auction sales to purchase all kinds of trumpery because it is cheap.

They see that their fences are well repaired, and their cattle are not grazing in the meadows, or grain fields, or orchards.

They plant their fruit trees well, care for them, and of course, get good crops.

They practice economy by giving their stock good shelter during the winter, also good food, taking all that is unsound, half rotten, or mouldy, out.

They do not refuse to make correct experiments in a small way, of many new things.

They do not keep tribes of cats, or snarling dogs, around their premises who eat more in a month than they are worth in a whole lifetime.

8. CANADIAN STANDARD WEIGHTS TO THE BUSHEL.

Wheat.....	60 lbs.	Hungarian Grass.....	48 lbs.
Peas.....	60 "	Millet.....	48 "
Beans.....	60 "	Red Top Grass.....	8 "
Indian Corn.....	56 "	Potatoes.....	60 "
Rye.....	56 "	Parsnips.....	60 "
Barley.....	48 "	Carrots.....	60 "
Buckwheat.....	48 "	Turnips.....	60 "
Oats.....	34 "	Beets and Onions.....	60 "
Clover Seed.....	60 "	Salt.....	56 "
Flax Seed.....	50 "	Malt.....	36 "
Timothy Seed.....	50 "	Dried Peaches.....	33 "
Hemp Seed.....	44 "	Dried Apples.....	22 "
Blue Grass Seed.....	14 "		

9. READING FOR FARMERS.

When the long evenings for reading come, and the question will come up to every intelligent farmer—How best to employ them? Of course, there are evenings in which pressing in-door work is to be done; there are evenings when the club or the lyceum must be attended, and evenings when friends and neighbours are to be visited or entertained at home. But it is well to have some suitable books always on the table, for your own reading and that of your family, so that the hours between dark and bed-time pass not unimproved. The books need not all treat of the farm, though it is desirable to have a few standard works on subjects relating thereto, in addition to the agricultural newspaper. Books of travel, of which there are now so many, liberalize, as well as instruct the mind, and have a charm for the young and the old. Such a work as the *Journey in Brazil*, by Agassiz, not only gives us sketches of the natural scenery, and of the manners and customs of the people of the country, but on account of its products, animal and vegetable, with their management and cultivation. The fund of information thus accumulated, if it be of no immediate practical use, will enlarge the views, and strengthen the intellect of the reader, and make him acquainted with other lands, and other practices, besides those in which he has been born and bred.

Farmers lead a life comparatively so isolated, they need the mental stimulus of reading to keep them from rusting. They have no Exchange, as merchants have, to sharpen their faculties by intercourse with others. They have the newspapers to tell them the events of the day, but too often they are read with such haste and carelessness as to make on the mind no lasting impression. From our newspapers, more perhaps than for any other source, we are in danger of becoming a nation of superficial readers, knowing a little of everything, but not much of anything.

Is it not desirable that you as a farmer, should know at least all about your own occupation, not only how best to conduct it, but the reasons for pursuing its varied practices, the why and the wherefore? Have you not some curiosity to study into the great laws of nature, which govern all animal and vegetable life, so that you may have a broader and more intelligent comprehension of your daily work? Have you not a secret desire to enlarge the horizon of your views, by reading what others have written of distant countries and peoples, giving you the benefit of their experiences, and to search diligently the volume of nature that is constantly opened to your study, filled with a myriad of wonders, enough, and more than enough, to reward your noblest aspirations?

A certain French writer once stood upon the balcony of a window that opened into his garden, looking out on the scene before him, and bitterly lamenting his scanty fortune, that would not permit him to travel. The sun was setting. At first his eye, and afterwards his soul, were enthralled by the magnificent sight. He thus soliloquized:—

“What! shall I be always like that poor goat which I see fastened to a post in a field yonder? She has already cropped all the grass which grew within the circle her cord allowed her to traverse, and she must recommence by nibbling the herbage which she has already eaten down close as velvet? Then I reflected that no traveller could possibly behold a more splendid spectacle than that which was spread before my eyes. And I thought of all the riches God has given to the poor; of the earth with its mossy and verdant carpets, its trees, its flowers, its perfumes, of the heavens, with aspects so various and so magnificent; and of all those eternal splendours which the rich man has no power to augment, and which so far transcends all he is able to buy. I thought of the exquisite delicacy of my senses, which enables me to enjoy these noble and pure delights, in all their plenitude.”

So may the thoughtful farmer reflect, and say to himself as he ponders the great Book of Nature, or the books which wise and good men have written for his perusal.—*Massachusetts Ploughman.*

10. ORNAMENTAL TREES.

We believe after all that has been said and done, shade and other ornamental trees are not sufficiently appreciated. We hear one and another talk of cutting down this oak or that maple that have been many years grown, just as though they were like a building that could be replaced whenever desired. And then, again, there is not one shade tree planted where there should be hundreds, if not thousands. Those who settle our country, and it is true of those who spread all over the United States, felt it their duty to level the forest and clear up the land, no great matter what became of it afterwards, and so we find in the more thickly settled parts of the country very few of the old trees. There are miles of roads and streets that have not a single tree by their side, that should have them for shade and ornament their whole length. There are tens of thousands of acres of land good enough to grow wood, that are now nearly barren as the Desert of Sahara, that should be planted with trees, or, what might be better in some cases, sown or planted with the seeds of fruit trees. In some sections of the country, attention has been given to, and premiums awarded for, plantations of forest trees. This work should go on until a large part of the rough, stony lands of New England, to say the least, should be restored to their former glory and beauty, and, we should also add, profitableness.

VI. Miscellaneous.

I. THE COMING OF SPRING.

The winter time is past and gone,
The time of silent death
And the grateful earth is quiet,
With the south wind's gentle breath.
In the half-shaded woods, and on
The sunny banks, again
The primrose buds are wakening
To the soft call of the rain:
And 'mid the pale palm-willow bloom
The bees' continuous hum,
And the thrush's song from out the copse,
Tell that the Spring is come.

Beautiful Spring! beneath her smile
The air grows warm and bright,
And rivulets through cowslip fields
Run laughing to the light;
In shady meadows, day by day,
The delicate cuckoo-flowers
Open their silvery cups to catch
The mild descending showers.
And deep within the budding hedge
His nest the goldfinch weaves,
Where the honeysuckle's winding sprays
Are set with tender leaves,

By cottage-doors the butterfly,
The earliest of Spring,
Above the golden crocus-beds
Stayeth his trembling wing;
And by old ponds the daffodil
Is bowing to the breeze,
That stirs in grassy lanes the boughs
Of clustering hazel trees;
And on the lonely mountain side,
By wood-paths mossed and gray,
And far up on the pasture slopes,
Gleameth the daisy's ray.

And now in gardens spreading far
Round antiquated halls,
With broad clear moats reflecting back
Smoothed turf and terraced walls,
The dark yews wear a fresher green,
And sweet at early dawn
The scent of hyacinths float forth
O'er walk and dewy lawn;
And cool winds, that at even-time
Down the long alleys pass,
Lay the blossoms of the almond tree
In crowds upon the grass.

Bright, blessed Spring! thy coming bids
A thousand thoughts arise,
Beautiful as the pearly light
Of thine own changing skies.
We pluck thy wild up-glancing flowers,
And wander by thy streams,

And thy sunshine brings to us again
The joy of vanished dreams ;
For down the vista of past years
Faint harp-like echoes ring,
Borne to our hearts upon thy breath,
O loved and lovely Spring !

2. OUR BEAUTIFUL SURROUNDINGS.

Man's nature is so marvellously constituted that he is reached and moved through the avenues of every sense. The spirit within him resembles a harp, the strings of which, as they are swept by every breeze, give out respondent tones. The music which strikes the ear summons answering feelings in the heart which is touched by the plaintiveness, or exalted by the cheerfulness, of the strain. The beauty which meets the eye, whether it is spread abroad in the glory of some noble prospect or blooms in the beauty of the opening flower, touches a cord within which responds to the outer influence. Thus the external world with its sight and sounds, and even subtler influences, often unrecognized, is ever reaching towards and affecting men even when they are most unconscious of its influence.

The lesson of this is that all, so far as possible, should surround themselves with objects calculated to excite pleasurable emotions. The wealthy generally do so; the instincts of a cultivated nature make the demand which their resources are adequate to meet; but the poor too seldom give sufficient thought or care to this. Yet there are few so destitute that they may not, if they will, bring a portion of the brightness, and the beauty of God's rich world into the circle of their own immediate lives. A picture hung upon the wall—and better a single good one than a score of daubs—a singing bird, hanging in its cage and sending the thrills of song, born of its joyous life, through all the dwelling; a flowering plant or two, breathing their fragrance on the air while they win the eye by the beauty of their glowing petals—these are within the reach of all, and, humble as they seem, they bring the ministries of beauty to the heart.

Men grow into the likeness of that which they constantly look upon. Beauty or deformity, alike, daguerreotype their images upon the heart, and it is perhaps, to the wretchedness of their material surroundings that much of the grossness and vice amongst the poorer classes may be traced. Even a shade tree before one's dwelling is of value, while a garden spot, however small, from which the meek-eyed flowers look up to him who tends them, is like an open page in a volume filled with lessons of purity and peace.

3. THE ALL-SEEING EYE.

One day, the astronomer, Mitchell, was engaged in making some observations on the sun, and as it descended toward the horizon, just as it was setting, there came into the range of the great telescope the top of a hill, about seven miles away. On the top of that hill was a large number of apple trees, and in one of them were two boys stealing apples. One was getting the apples, and the other was watching to make certain that nobody saw them, feeling that they were undiscovered. But there sat Professor Mitchell, seven miles away, with the great eye of his telescope directed fully upon them, seeing every movement they made as plainly as if he had been under the tree with them. So it is often with men. Because they do not see the eye which watches with a sleepless vigilance, they think they are not seen. But the great open eye of God is upon them, and not an action can be concealed. There is not a deed, there is not a word, there is not a thought which is not known to God.

4. "FIVE MINUTES LATE."

There is something admonitory and awful in the punctuality of God. The universe depends upon it, and the dependence never fails. The sun never rises, the sun never sets, an instant late. The moon is never late in waxing or in waning. The stars are never late in fulfilling their courses. Even the comets know their time and observe it. God's punctuality in the administration of the universe is the reason why astronomy may predict the occurrence of an eclipse ten thousand years hence without fear of erring by a moment of time.

God is punctual, too, in his providence. His punctuality here is still more awful than his punctuality in the universe, because it is less observable, and because its consequences are of a moral nature. How long He waited until the exact fulness of time arrived for the coming of Christ! How continually did Christ himself talk about

His "time" and His "hour," never forestalling, never postponing it one instant.

But here is a Sunday school teacher "five minutes late!" Let us consider what are some of the consequences which this tardiness produces. In the first place it discomposes the teacher himself with a sense of delinquency. If it does not do this, it proves the teacher's conscience to be deficient in enlightenment or in sensibility. In the second place, it produces the effect of relaxing the spirit of punctuality in the whole school. The standard of the school depends sensitively on the regularity of every person in it—especially on the regularity of every teacher in it. In the third place, if the superintendent is above being influenced towards remissness himself by the example of a remiss teacher, he is at least not above being disturbed by it. Every such flutter in the tranquillity of a superintendent's heart, helps to make up the terrible cost at which a devoted, intense Christian man fulfils his arduous office of Sunday school oversight. It is nothing less than cruel, needlessly to multiply such occasions of anxiety. In the fourth place, it unsettles the habit of punctuality—in the members of the tardy teacher's class in particular. Next Sunday some scholar in it will say, consciously or unconsciously, "Very likely the teacher will be a little late to-day—he was last Sunday. I needn't hurry." In the fifth place, five minutes' time is lost—five minutes multiplied by the number of scholars in the class. In the sixth place, five minutes' time has probably been worse than lost. The class have got to talking and disturbing other classes. They have taken to reading or to making pictures. They have begun to gaze about to see what is going on in another part of the room—perhaps have established a telegraphic communication with the members of a different class somewhere, distracting the attention of that class from their teacher. In short, the five minutes have gone to set off the minds and hearts of the teacherless class in various wrong directions, from which several times five minutes will be necessary to recall them—if, indeed, they can even be so successfully recalled. Teacher, is it well to be "five minutes late?"—Rev. W. C. Wilkinson, in the *Sunday School Journal*.

5. THE JOURNAL OF EDUCATION FOR ONTARIO.

Extracts from the opinions of Local Superintendents in regard to the *Journal of Education for Ontario*.

DEPARTMENTS FOR 1869.

(From the Appendix to the Chief Superintendent.)

George Malone, Esq., Wolfe Island.—I am sorry to see any complaint of the issue of the *Journal of Education*, and I can only say that, in this township, it is regularly and eagerly sought after by the trustees; and this I have the best means of knowing as I am postmaster here.

James Knight, Esq., M. D., Sheffield.—The *Journal of Education* is received in all the sections as far as I know. I believe I can safely say, it is exerting a most beneficial influence upon the cause for which it is designed—to enlighten those who have sufficient capacity for information.

Charles E. File, Esq., Fredericksburgh North.—The *Journal of Education* is held in high estimation by all who have a literary taste. It not only affords aid to the trustees by giving explanations in regard to the various clauses of the School Act, but it also gives general instructions in regard to the working of the School System, both in this and other countries—instructions which we should not otherwise receive.

Rev. Robert McKenzie, Gower South.—In several of the schools the *Journal of Education* is received, and read, and deservedly appreciated.

Rev. John Carroll, Leeds and Lansdowne Front.—The *Journal of Education* is regularly received and highly appreciated by trustees and teachers.

Charles Judge, Esq., Sherbrooke South.—The *Journal of Education* is received and read by some, and has a good influence on those who read it; others are too careless to read anything good.

John Haliday, Esq., Bagot.—The *Journal of Education* is regularly received, as far as I know, the reading public prize it very much.

James Babcock, Esq., Bedford.—The *Journal of Education* is a welcome visitor in most of the schools and families, and is read with great interest.

Rev. Frederick Burt, Anson, Minden and Lutterworth.—The *Journal of Education* is much prized by trustees and teachers.

Rev. Walter Wright, Draper, Macaulay, Ryde, and Stephenson.—The *Journal of Education* is much prized, as it surely ought to be.

J. D. Smith, Esq., M. D., Scott.—The *Journal of Education* is regularly received, and produces very beneficial effects on the school.

VII. Monthly Report on Meteorology of the Province of Ontario.

I. ABSTRACT OF MONTHLY METEOROLOGICAL RESULTS, compiled from the Returns of the daily observations at ten High School Stations, for FEBRUARY, 1871.

OBSERVERS:—Pembroke—James Smith, Esq., M.A.; Cornwall—James H. Coyne, Esq., B.A.; Barrie—H. B. Spotton, Esq., M.A.; Peterborough—Ivan O'Beirne, Esq.; Belleville—A. Burdon, Esq.; Goderich—James Preston, Esq., B.A.; Stratford—C. J. Macgregor, Esq., M.A.; Hamilton—A. Macallum, Esq., M.A.; Simcoe—James J. Wadsworth, Esq., M.A.; Windsor—J. Johnston, Esq., B.A.

Table with columns: STATION, ELEVATION, BAROMETER AT TEMPERATURE OF 32° FAHRENHEIT, TEMPERATURE OF THE AIR, MONTHLY MEANS, DAILY RANGE, HIGHEST, LOWEST, RANGE, MONTHLY MEANS, TEMPERATURE OF THE AIR, WARM-EST DAY, COLD-EST DAY, MONTHLY MEANS.

Approximation. d On Lake Simcoe e Near Lake Ontario on Bay of Quinte. f On St. Lawrence. g On Lake Huron. A On Lake Ontario. i On the Ottawa River. j Close to Lake Erie. m On the Detroit River. k Inland Towns.

Table with columns: STATION, HUMIDITY OF AIR, WINDS, NUMBER OF OBSERVATIONS, MOTION OF CLOUDS, AMOUNT OF CLOUDINESS, VELOCITY OF WIND, ESTIMATED VELOCITY OF WIND, RAIN, SNOW, AURORAS, WHEN OBSERVED.

a Where the clouds have contrary motions, the higher current is entered here. b Velocity is estimated, 0 denoting calm or light air; 10 denoting very heavy hurricane.

REMARKS.

PEMBROKE.—On 6th, lunar halo. Wind storms, 2nd, 9th, 24th, 28th. Snow 3rd, 4th, 8th, 9th, 13th, 16th, 18th, 27th. Rain, 1st, 24th. Sleight has been good throughout month, but drifts pretty deep. Month characterized by severe storms, affecting the temperature and weight of the atmosphere, as well as the current. CORNWALL.—Snow, 2nd, 3rd, 8th, 9th, 10th. Rain, 18th. BARRIE.—On 3rd, very violent storm of wind. 6th, lunar halo.

night, together with a blood red tinge in some parts of the sky similar to that observed last summer and fall. Wind storm, 3rd. Snow, 3rd, 8th—10th, 12th, 17th, 18th. Rain, 18th.

GODERICH.—On 4th, 6th and 25th, large lunar halo at 9 P.M. 5th, (Sunday), coldest day of month; at 9 A.M. temperature $-7^{\circ}6$; 1 P.M. $-1^{\circ}2$; 9 P.M. $-2^{\circ}0$; thus the mean temperature could not (as the mercury was rising at 9 A.M.) be less than $-3^{\circ}6$, but no observation was taken at 7 A.M. Thaw on 16th and 17th removed most of the snow, and quite destroyed the sleighing. Wind storms, 2nd, 17th, 18th, 24th, 27th, 28th. Snow, 2nd, 4th, 9th, 10th, 13th, 14th, 16th—19th, 21st, 26th, 27th. Rain, 24th.

STRATFORD.—On 24th, Crows seen (first of season). The difference from normals of the mean daily temperature were as follows:—

Day.	Difference.	Day.	Difference.
1.....	+ 8.2	15.....	+ 5.7
2.....	+ 3.1	16.....	+ 6.9
3.....	+ 6.8	17.....	+ 6.1
4.....	-10.1	18.....	+ 0.3
5.....	19.....
6.....	-14.0	20.....	- 0.8
7.....	- 2.8	21.....	-10.0
8.....	+ 6.3	22.....	- 8.9
9.....	+ 4.9	23.....	+ 8.5
10.....	- 7.8	24.....	+19.7
11.....	- 7.2	25.....	+11.1
12.....	26.....
13.....	-10.5	27.....	+ 1.0
14.....	- 4.0	28.....	+ 3.4

Excess of monthly mean temperature over average of 9 years, $0^{\circ}74$. Wind storms, 2nd, 3rd, 9th, 24th, 27th, 28th. Fogs, 13th, 17th. Snow, 2nd, 8th, 9th, 12th, 14th, 16th, 17th, 19th, 26th, 27th. Rain, 24th.

HAMILTON.—On 26th, hail. Wind storms, 3rd, 9th, 10th, 12th, 15th, 16th, 18th, 24th, 28th. Snow, 2nd, 7th, 9th, 12th, 17th, 18th, 26th. Rain, 18th, 24th, 26th. Very little moisture fell during the month; gales have been rather prevalent, and on several occasions they rose to 6.

SIMCOE.—Wind storms, 2nd, 3rd, 9th, 24th, 28th. Snow, 12th, 13th, 17th, 19th. Rain, 1st, 24th, 27th. The diurnal distribution of temperature this month has been unusual; the maxima and minima have frequently occurred at 9 P.M.; a fact which points to sudden and great changes of temperature; there have been many days in February in which the maxima has been the minimum of the day previous, and vice versa.

WINDSOR.—On 1st, 2nd and 3rd, lunar halo. 24th, meteor in E towards N. Wind storms, 2nd, 3rd, 4th, 6th, 9th, 18th, 24th, 28th. Fog, 13th. Snow, 7th, 8th, 12th, 17th, 20th, 26th, 27th. Rain, 17th, 18th, 24th, 28th.

VIII. Papers for Boys and Young Men.

1. TO OUR VILLAGE BOYS.

Boys avoid profane companions; they can do you no good, and may do you much harm by learning you their evil habits. If you have any self-respect, if you wish to become useful members of society, instead of "loafers," who are only a pest to the community in which they live, have no companionship with any boy or man who uses profane, vulgar, or mean language. Such companions can only have a demoralizing effect—can only have a tendency to make you as vile as they. Many boys seem to be in a hurry to become men, and many seem to think that the one who can use the worst language, smoke and chew the most tobacco, and drink the most intoxicating liquors, comes the nearest to being a man, and they will, therefore, try to acquire these *accomplishments* as soon as possible, and will laugh at all their companions who are not so forward to learn evil, and try to make them as vile as themselves.

It has been truly said, that the person who dares to take the name of his Maker in vain, cannot be trusted in his dealings with his fellow men; for the person who does not fear his Maker, cannot be expected to fear man, and if he lie, and steal, and even commit greater crimes, no one need be surprised.

With the habit of profanity, may often be found lying, fighting, stealing, cruelty to animals, killing birds and robbing their nests, and other evil habits too numerous to mention. And the boy who has got thus far on the downward road, is at least in danger of being induced to commit greater sins, which may, at last, lead him to the prison or gallows.

Remember, boys, that the worst criminals were once free from sin, and all begun their life of crime by committing little crimes at first; and many have been led on from one sin to a worse one, by having vile companions; and if you can find none who are really good for companions, have none; better to obtain good instructive books and papers, which are companions you *never need fear*.—*Iowa Instructor*.

2. PERSEVERANCE, A LESSON TO BOYS.

Every boy should have written on his memory with the point of a diamond, the history of Cyrus Field, in his efforts to perfect the Atlantic telegraph. It required thirteen years of the most untiring labour, and "often," says Mr. Field, "has my heart been fit to sink. Many times when wandering in the forests of Newfoundland,

in the pelting rain, or on the decks of ships in dark, stormy nights, alone, far from home, I have often accused myself of madness and folly, thus to sacrifice the peace of my family, and all the hopes of life, for what might prove at last only a dream. Yet one hope led me on, and I have prayed that I might not taste death till this work was accomplished. That prayer is answered, and now, beyond all acknowledgement to men, is the feeling of gratitude to God." Whatever your line of work, remember it is only similar industry and perseverance that will gain you the highest success. You can crawl along through life, like the earth-worm, with low aims and attainments, and never be obliged to make much exertion, but who would desire an earth-worm's existence. Who would desire to leave so little record "on the sands of time?"

3. RELIGIOUS EDUCATION OF CHILDREN.

A writer in the *Springfield Republican* observes:—

"There is a good deal said, now-a-days, about the religious education of children by formal and set methods. We have sermons preached to them, and books written for the level of their comprehension, and Sunday Schools must be arranged on some new and approved plan, so that they will not prove such a weariness to the flesh and spirit as they frequently do now.

"There is nothing so much like picking open rose buds to make them bloom faster, as some of these spiritual hot house forcing processes which very well meaning people inaugurate and sustain for the rising generation. There is no task so difficult for the parent and teacher as to draw the line in the child's education between ignorance of so-called revealed religion and irreverence on the one hand, and a hypocritical acceptance and sanction on the other of what is imposed on childhood as the parent of all high aspiration, and the handmaid of God and virtue. After all ought not the ministrations to change hands, and be found with those whose 'angels do not always behold the face of the Father,' and whose living forms Christ blest while on earth, and said of them, 'of such is the kingdom of heaven?' But the world does move, and no one now brings forward the favorite doctrine of less than fifty years ago, of infant damnation—even the staunchest orthodoxy ignores it.

"There was a famous book in those days, called 'The Day of Doom: or a Poetical Description of the Great and Last Judgment, with a Short Discourse about Eternity,' by Michael Wigglesworth, 1828. I quote from the part devoted to settling the future state of infants:

"Then to the bar all they drew near
Who dy'd in infancy,
And never had or good or bad
Effected personally.
But from the womb unto the tomb
Were straightway carried,—
Or at the least, e'er they transgressed,
Who thus began to plead."

"They plead in vain—the judge is inexorable—the sentence is pronounced.

"A crime it is, therefore in bliss
You may not hope to dwell,
But unto you I do assign
The easiest room in hell.
The tender mother will own no other,
Of all her numerous brood,
But such as stand at Christ's right hand,
Acquitted through his blood;
The pious father had now much rather
His graceless son should lie,
In hell with devils for all his evils,
Burning eternally.

You sinners are, and such a share
As sinners may expect
Such you shall have, for I do not save
None but my own elect.
Yet to compare your sin with theirs
Who lived a longer time,
I do confess yours is much less,
Though every sin's a crime.

"I should not quote this at such length did I not think the book was out of print, or very nearly so. The natural heart of man, or woman, has settled this matter better than the theologian."

4. YOUNG MEN'S RULES FOR LIFE.

The following rules from the papers of Dr. West, were, according to his memorandum, thrown together as general way marks in the journey of life:—

Never to ridicule sacred things, or what others may esteem such, however absurd they may appear to be.

Never to show levity when the people are professedly engaged in worship.

Never to resent a supposed injury till I know the views and motives of it. Nor on any account to retaliate.

Never to judge a person's character by personal appearance.

Always to take the part of an absent person who is censured in company, so far as truth and propriety will allow.

Never to think the worse of another on account of his differing with me in political or religious opinion.

5. SOMETHING FOR YOUNG MEN TO READ.

If every boy and young man would sit down and carefully read and candidly consider the following suggestions of the Philadelphia *Ledger*, he would get a lesson, the want of which has been the ruin of thousands:—"There can be no more certain assurance to a young man of a disastrous business life, than the incurring of debts during his minority. And the term minority may be considered to include the years which he remains in the position of clerk or pupil, even though his years extend beyond 'one and twenty,' which to many a heedless youth is the date of confirmed pecuniary slavery or freedom. Expensive habits among clerks, apprentices, the undergraduates in colleges, and the students of professions, lead to pecuniary embarrassments of the very worst descriptions, for it is not seldom the case that the parents of their young men are put to great cost, and frequently have to exercise the most rigid economy, to provide and continue the means for their support. The calculation of expenses has been based upon the necessary outlay only. Many of the fondest parents would not decline to mortgage their property, or to obtain money at interest, or to wrong their other children, in order to give to the favourite son, money to expend in amusements, over-dressing, or dissipation in any form. The young man himself would not dare to ask this in plain terms, and yet not a few incur expenses, and appeal through a mother, or a self-denying sister, for the funds to obtain release from difficulty or to avert disgrace. This is virtually the form of the highwayman reversed to suit the case: "Your money or my life." The parental instinct and the family pride thus appealed to, the applicant is successful, while any power of satisfaction to the demand is left; and the household at home pinch themselves that the graceless son may flourish abroad.

"But appetite grows on what it feeds on, and all that can be raised at home is not sufficient. Habits of duplicity are created, and the fond parents are deceived into thinking that they had quenched the fire, when they have only, in reality, been supplying fuel. The young spendthrift is more involved than ever—more extravagant and more reckless. The evil habit of indulgence to escape thought follows, and from the first sad mistake of outrunning the income, a life of mistakes is dated. The small leak sinks the ship, and a sad wreck, mental, moral and pecuniary, is the result. Parental affection sent forth the bark fully equipped, and hoped to see it return fully freighted. But the result is, everything lost, not excepting honour."

6. PICKING UP THOUGHTS.

Boys, you have heard of blacksmiths who became mayors and magistrates of towns and cities, and men of great wealth and influence. What was the secret of their success? Why, they picked up nails and pins in the street, and carried them home in the pockets of their waistcoats. Now, you must pick up thoughts in the same way, and fill your mind with them; and they will grow into other thoughts, almost while you are asleep. The world is full of thoughts, and you will find them strewn everywhere in your path.—*Élihu Burritt*.

7. THE TRIUMPHS OF OLD AGE.

Physiologists tell us that, with a greater prevalence of a knowledge of the laws of health, the world may expect an increase of the average duration of human life. Perhaps this time is already dawning. At any rate here are a few "health" considerations for those above fifty. All churches that have pastors of seventy years of age and upward, are requested to draw comfort from these considerations of *The Methodist*: Von Moltke, quite juvenile at seventy, plans and executes such a campaign as modern ages have never witnessed; his sovereign, tough as oak at seventy-four, roughs it on the field as jauntily as a young lieutenant. Von Roon, the Prussian War Minister, older than either general or king, directs from Berlin the marshalling of hosts and gathering of supplies. Nor are these wonders confined to the German side of the contro-

versy. Thiers, at seventy-five, flits with the vivacity of a boy from one camp to the other, is a negotiator of peace and the executive head of the French Government. Of his associates, Dufaure, the Minister of Justice, is seventy three. Guizot, King Louis Philippe's ex-Minister, though past eighty, writes books with as much precision and force as when he occupied a professor's chair.

In England, where men are reckoned young till they are past fifty, splendid examples of vigorous old age have not been wanting. Palmerston, Lyndhurst and Brougham, octogenarians all of them, led public opinion in Great Britain to the end of their days, and died in harness. It is said of the first of the three, that after a field night in the House of Commons, he would be seen at daylight walking home at a pace which a young man could hardly equal. Thomas Carlyle, over seventy, abates nothing of his intellectual vigor; while Lord John Russell, though creeping towards eighty, still attends the Upper House of Parliament. Our own country, too, furnishes as striking instances of hearty old age. Stewart, Drew and Vanderbilt, the money-kings of this city, are old men, as the years are counted; but still hold firmly in their grasp, the great interests which they control. Bryant, editor and poet, at seventy-four translates Homer, and, judging by his numerous public addresses, must be as busy as ever. The grave has just closed over Dr. Skinner, who nearly half a century ago was famous as a preacher, and of whom it may be said, that to the last "his eye waxed not dim, nor did his strength abate."

8. SELF-TAUGHT MEN.

Many men are said to be self-taught. No man was ever taught in any other way. Do you suppose a man is a bucket, to be hung on the well of knowledge and pumped full? Man is a creature that learns by the exertion of his own faculties. There are aids to learning, of various kinds; but, no matter how many of these aids a man may be surrounded by, after all, the learning is that which he himself acquires. And, whether he be in college or out of college, in school or out of school, every man must educate himself. And in our times and our community every man has the means of doing it.—*H. W. Beecher*.

9. OBSTINACY OVERCOME.

A gentleman related in my presence a little incident which I give as I heard it. A waggon was passing heavily laden with slates; the horse stopped, refusing to be urged or cajoled into starting. Of course, I expected, as usual, to see the driver use his whip, or perhaps his heavy boots, with an accompaniment of shouts and oaths, to remind the animal of his neglect of duty; he went to the waggon, and commenced fumbling in its depths. Now, thought I, that poor horse will receive a most tremendous beating; and I waited the issue with bated breath. But instead of the heavy stake which I anticipated, he drew out an old wooden bucket, the outside covered with meal, the remains of former lunches; ran along the road for some distance before the horse, and set it down. The animal, true to his instincts, forgetting his former obstinacy and whims, hurried towards the well-remembered receptacle of former enjoyments, and the battle was won by a little quiet management, saving pain and trouble for both man and beast. Now, thought I, as I went on my way rejoicing, here is a lesson for educators. Don't drive and push, and swear and scold, but accomplish your object, whether it be with child or "dumb animal," by means of some incentive to the performance of duty, which shall recall pleasures past, or be an earnest of joys to come.—"*Teacher*," in *Our Dumb Animals*.

10. OF WHAT PROFIT IS KNOWLEDGE?

Dr. Guthrie says:—"A man may know all about the rocks, and his heart remain as hard as granite or adamant; he may know all about the winds, their courses and their currents, and be the sport of passions as turbulent and fierce as they; he may know all about the stars, and his fate be the meteor's, that blazes for a little while, and is then lost, quenched in eternal night; he may know all about the sea, and be a stranger to the peace of God; his soul may resemble the troubled waters, which, lashed by storms and ruffled by every breath of wind, cannot rest, but throws up mire and dirt; he may know how to rule the spirit of the elements, but not know how to rule his own; he may know how to turn aside the deadly thunderbolt, but not the wrath of an angry God; you may know all, in short, that man's genius has discovered or his skill invented, but if you do not know Jesus Christ, if your eyes have never been opened to a saving knowledge of the truth, what will that avail you when they are fixed in the sockets, glazed by the hand of death? Equally by the death-bed of the greatest philosopher, as of the

hardest miser that ever ground the face of the poor, there is room and reason for the solemn question. What shall it profit a man if he shall gain the whole world—all its learning, its wealth, its pleasures, and honors—and lose his own soul?"

11. ALPHABET OF PROVERBS.

A grain of prudence is worth a pound of craft.
Boasters are cousins to liars.
Confession of faults makes half amends.
Denying a fault doubles it.
Envy shooteth at others and wounds himself.
Foolish fear doubles danger.
God reaches us good things by our hands.
He has hard work that has nothing to do.
It costs more to revenge wrongs than to bear them.
Knavery is the worst trade.
Learning makes a man fit company for himself.
Modesty is a guard to virtue.
Not to hear conscience is the way to silence it.
One hour to day is worth two to-morrow.
Proud looks make foul work in fair faces.
Quiet conscience gives quiet sleep.
Richest is he that wants least.
Small faults indulged are little thieves that let in larger.
The boughs that bear most hang lowest.
Upright walking is sure walking.
Virtue and happiness are mother and daughter.
Wise men make more opportunities than they find.

12. THE SUNSHINE OF KINDNESS.

Said an old merchant one day—"I never did an act of kindness to any human being without finding myself the happier for it afterwards. A single friendly act, cheerfully, pleasantly and promptly done to a fellow creature in trouble or difficulty, besides the good to him, has thrown a streak of sunshine into my heart for the remainder of the day, which I would not have taken a five pound note for.

13. CHARACTER AND BENEFIT OF LAUGHTER.

It is said by good medical authority that there is not the remotest corner or little inlet of the minute blood vessels of the human body that does not feel some wavelet from the convulsion occasioned by hearty laughter, and that the "central man" of life principle is shaken to its innermost depths, sending new life and strength to the surface and thus materially tending to insure good health to the person who indulges therein. The blood moves more rapidly—probably caused by some chemical or electric modification occasioned by the convulsion—and conveys a different impression to all the organs of the body as it visits them on that particular mystic journey, when the man is laughing, from what it does at other times. For this reason every good, hearty laugh in which a person indulges, tends to strengthen life, conveying, as it does, new and distinct stimulus to the vital forces. We doubt not the time will come when physicians, conceding more importance than they now do to the influence of the mind upon the vital forces of the body, will prescribe to the torpid and melancholy patient, a certain number of hearty peals of laughter, to be undergone at stated periods, and believe that they will, in so doing, find the best and most effective method of producing the required effect upon the patient. Our advice to all is, indulge in good, hearty, soulful laughter whenever the opportunity offers, and if you do not derive material benefit therefrom, charge us with uttering false principles of *materia medica*.

IX. Departmental Notices.

CONSOLIDATED SCHOOL ACTS.

In an early number we hope to publish the entire text of the School Acts of 1850, 1860 and 1870-1. They will be incorporated in one Act, so that Local Superintendents, Trustees, Teachers and other interested parties will be able to see at a glance what modifications in our present School Laws have been made by the new Act.

NEW SCHOOL REGISTERS.

In reply to numerous applications for Public School Regis-

ters, &c., we desire to say that a new edition (including the modifications in the courses of study required by the new School Act) will be shortly prepared and published. They will be sent to the County Clerks, for distribution through the Local Superintendents or Inspectors, but none will be sent out direct to individual schools from the Education Department.

PROFESSIONAL BOOKS SUPPLIED TO LOCAL SUPERINTENDENTS AND TEACHERS.

Text-books must be paid for at the full catalogue price. Colleges and private schools will be supplied with any of the articles mentioned in the catalogue at the prices stated. Local Superintendents and teachers will also be supplied, on the same terms, with such educational works as relate to the duties of their profession.

PREPAYMENT OF POSTAGE ON BOOKS.

According to the postage law, the postage on all books, printed circulars, &c., sent through the post, *must be pre-paid by the sender*, at the rate of one cent per ounce. Local superintendents and teachers ordering books from the Education Department, will therefore please send such an additional sum for the payment of this postage, at the rate specified, and the customs duty on copyright books, as may be necessary.

PUBLIC LIBRARY BOOKS, MAPS, APPARATUS, AND SCHOOL PRIZE BOOKS.

The Chief Superintendent will add *one hundred per cent.* to any sum or sums, *not less than five dollars*, transmitted to the Department by Municipal and School Corporations, on behalf of Grammar and Common Schools; and forward Public Library Books, Prize Books, Maps, Apparatus, Charts, and Diagrams, to the value of the amount thus augmented, upon receiving a list of the articles required. In all cases it will be necessary for any person acting on behalf of the Municipal or Trustee Corporation, to enclose or present a written authority to do so, verified by the corporate seal of the Corporation. A selection of Maps, Apparatus, Library and Prize Books, &c., to be sent, can always be made by the Department, when so desired.

☞ Catalogues and forms of application furnished to school authorities on their application.

* * If Library and Prize Books be ordered *in addition* to Maps and Apparatus, it will be NECESSARY FOR THE TRUSTEES TO SEND NOT LESS THAN *five dollars additional* for each class of books, &c., with the proper form of application for each class.

TABLET READING LESSONS.

Being the First Book of Lessons in object form, in thirty-three sheets (By post, postage paid, \$1)	Price \$0 75
Mounted on 17 sheets of thin cardboard.....	" 1 75
Mounted on 17 sheets of stiff cardboard, varnished	" 2 75
Mounted on 33 sheets of stiff cardboard, varnished	" 3 50
Mounted on 33 sheets superior cardboard, varnished	" 4 50

CONFEDERATION MAP OF BRITISH NORTH AMERICA.

New Map of British North America, including Nova Scotia, New Brunswick, Prince Edward Island, Newfoundland, Vancouver Island, British Columbia, Red River, Swan River, Saskatchewan; showing at one view (without any dividing boundaries) the Provinces embraced in the proposed new Dominion of Canada, &c., with a map of Steamship Routes between Europe and America, &c., &c. 7ft. 9in. by 3ft. 9in. Constructed and lately published under the supervision of the Education Department for Upper Canada. Price \$6.

ASSORTED PRIZE BOOKS IN PACKAGES.

Selected by the Department, for Grammar or Common Schools, from the Catalogue, in assorted packages, as follows.

Package No. 1.	Books and Cards, 5cts. to 70cts. each	...\$10
„ No. 2.	Ditto ditto 5cts. to \$1.00 each	...\$16
„ No. 3.	Ditto ditto 5cts. to \$1.25 each	...\$20
„ No. 4.	Ditto ditto 10cts. to \$1.50 each	...\$26
„ No. 5.	Ditto ditto 10cts. to \$1.75 each	...\$30
„ No. 6.	Ditto ditto 10cts. to \$2.00 each	...\$36
„ No. 7.	Ditto ditto 15cts. to \$2.25 each	...\$40
„ No. 8.	Ditto ditto 15cts. to \$2.50 each	...\$46
„ No. 9.	Ditto ditto 15cts. to \$2.75 each	...\$50
„ No. 10.	Ditto ditto 20cts. to \$3.00 each	...\$56
„ No. 11.	Ditto ditto 20cts. to \$3.25 each	...\$60
„ No. 12.	Ditto ditto 20cts. to \$3.50 each	...\$66
„ No. 13.	Ditto ditto 25cts. to \$3.75 each	...\$70
„ No. 14.	Ditto ditto 25cts. to \$4.00 each	...\$76
„ No. 15.	Ditto ditto 25cts. to \$4.25 each	...\$80
„ No. 16.	Ditto ditto 30cts. to \$4.50 each	...\$86
„ No. 17.	Ditto ditto 30cts. to \$4.75 each	...\$90
„ No. 18.	Ditto ditto 30cts. to \$5.00 each	...\$96
„ No. 19.	Ditto ditto 35cts. to \$5.25 each	\$100
„ No. 20.	Ditto ditto 35cts. to \$5.50 each	\$120

☞ *Special Prizes*, in handsomely bound books, singly at from \$1.05 to \$5.50. In sets of from two to six volumes of Standard Literature, at from \$3.00 to \$10.00 per set. Also Microscopes, Drawing Instruments, Drawing Books, Classical Texts, Atlases, Dictionaries, Small Magic Lanterns, Magnets, Compasses, Cubes, Cones, Blocks, &c., &c.

* * Trustees are requested to send in their orders for prizes at as early a date as possible, so as to ensure the due despatch of their parcels in time for the examinations, and thus prevent disappointment and delay.

☞ The *one hundred per cent.* will not be allowed on any sums less than *five dollars.*

We cannot too strongly urge upon School Trustees, the importance and even the necessity of providing, (especially during the autumn and winter months,) suitable reading books for the pupils in their schools, either as prizes or in libraries. Having given the pupils a taste for reading and general knowledge, they should provide some agreeable and practical means of gratifying it.

INTER-COMMUNICATIONS IN THE "JOURNAL."

As already intimated, a department is always reserved in the *Journal of Education* for letters and inter-communications between Local Superintendents, School Trustees and Teachers, on any subject of general interest relating to education in the Province. As no personal or party discussions have, ever since the establishment of the *Journal*, appeared in its columns, no letter or communication partaking of either character can be admitted to its pages; but, within this salutary restriction, the utmost freedom is allowed. Long letters are not desirable; but terse and pointed communications of moderate length on school management, discipline, progress, teaching, or other subjects of general interest are always acceptable, and may be made highly useful in promoting the great objects for which this *Journal* was established.

SUNDAY SCHOOL BOOKS AND REQUISITES.

Application having been frequently made to the Department for the supply from its Depository of Sunday School Library and Prize Books, Maps and other requisites, it is deemed advisable to insert the following information on the subject.

1. The Department has no authority to grant the one hundred per cent. upon any remittance for Library or Prize Books, Maps or Requisites, except on such as are received from Municipal or Public School Corporations in Upper Canada. Books, Maps and other Requisites suitable for Sunday Schools, or for

Library or other similar Associations, can however, on receipt of the necessary amount, be supplied from the Depository at the net prices, that is about twenty-five or thirty per cent. less than the usual current retail prices.

2. The admirable books published in England by the Society for Promoting Christian Knowledge, and by the London Religious Tract Society, are furnished from the Societies' catalogues at currency for sterling prices (i. e. a shilling sterling book is furnished for twenty cents Canadian currency, and so on in proportion.) These two catalogues will, as far as possible, be furnished to parties applying for them. Books suitable for Sunday Schools are received from the other large religious societies, Presbyterian and Methodists, and from the various extensive publishers in Britain and the United States, but the list would be too extensive to publish separately.

3. On receiving the necessary instructions, a suitable selection can be made at the Department, subject to the approval of the parties sending the order. Any books, maps, &c., not desired which may be sent from the Depository, will be exchanged for others, if returned promptly and in good order.

Advertisements.

GILCHRIST SCHOLARSHIP.

The terms and conditions of this Scholarship, and lists of the subjects for the examination in the year 1871, have been sent to the principal educational institutions in the Province; and can also be obtained, on application, at the Provincial Secretary's office, Parliament Buildings, Toronto.

The next examination will be held on the 26th June, and candidates, names and papers must be submitted not later than 1st May.

For further particulars see *Ontario Gazette*; or apply to

N. C. CAMERON,
Secretary.

IMPORTANT TO TEACHERS AND SCHOOL TRUSTEES!

Ruttan's New Ventilating Stoves,

RECOMMENDED BY TORONTO BOARD OF SCHOOL TRUSTEES, who certify that they consume but 2½ Cords of wood a year. They change all the air in a room every four minutes.

Apply to

E. & C. GURNEY,
Yonge Street, Toronto.

p'd.

Ruttan's New Ventilating Stoves

CONSUME TWO AND A HALF CORDS A YEAR IN SCHOOLS.

See certificates of the Toronto Board.

School Trustees will please send orders to H. I. Ruttan, Cobourg, who will send the plan for ventilation free of charge.

Mr. Ruttan has an exclusive patent for tubular ventilating stoves and the COLD AIR DUCT. All persons infringing will be prosecuted.

p'd. Made by E. & C. GURNEY, Toronto.

JUST PUBLISHED,

FIRST LESSONS IN AGRICULTURE,

For Canadian Farmers and their Families, by Rev. EGERTON RYERSON, LL.D. Price 50 cents. Free by post 60 cents.

Published and Sold by COPP, CLARK & CO., Toronto,

NOVEMBER, 1870.

And by all Booksellers.

SHORT ADVERTISEMENTS inserted in the *Journal of Education* for 20 cents per line, which may be remitted in postage stamps or otherwise.

TERMS: For a single copy of the *Journal of Education*, \$1 per annum. Back vols., neatly stitched, supplied on the same terms. All subscriptions to commence with the January Number, and payment in advance must in all cases accompany the order. Single numbers, 10 cents each.

All communication to be addressed to J. GEORGE HODGINS, LL.D. Education Office, Toronto.