

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. |

JOURNAL OF

Province of



EDUCATION

Ontario.

VOL. XXV.

TORONTO, NOVEMBER, 1872.

No. 11.

CONTENTS OF THIS NUMBER:

	Page.
ADVANTAGES OF SUPERSEDING SCHOOL SECTION DIVISIONS, AND ESTABLISHING A TOWNSHIP BOARD OF EDUCATION.....	161
I. PAPERS ON EDUCATION IN VARIOUS COUNTRIES.—1. Schools of Europe and America. 2. Defects in American Schools, and Remedy. 3. A New School Feature. 4. Compulsory Education. 5. Compulsory Education. 6. Why don't somebody do something for the Schools. 7. Colleges for Women. 8. Lindsay Separate Schools. 9. Sunday Schools in Canada.....	164
II. PAPERS ON PRACTICAL EDUCATION.—1. School Reading is not Reading. 2. The Neglected Luxury of Spelling. 3. Primary Lesson in Botany. 4. Practical and Applied Science.—An Important Question. 5. Opening School.....	167
III. BIOGRAPHICAL SKETCHES.—1. The Rev. Wm. Ryerson. 2. T. C. Street, Esq., M. P. 3. Mrs. Pearce. 4. Mr. Marcus Holmes. 5. "Fanny Fern." 6. J. F. Maguire, Esq., M. P. 7. Sketch of Captain Joseph Brant.....	169
IV. MONTHLY REPORT OF THE PROVINCE OF ONTARIO.—2. Meteorology in Canada ..	171
V. MATHEMATICAL DEPARTMENT.—1. To the Editor of the Journal of Education. 2. To the Editor of the Journal of Education.....	172
VI. MISCELLANEOUS.—1. Indian Summer in Canada. 2. Politeness in School. 3. Tact. 4. A Word to Boys. 5. Faithfulness to Employers. 6. Your Evenings, Young Men. 7. Read an Hour a Day. 8. Archbishop Sumner on Obstacles and Improvements.....	172
VII. EDUCATION INTELLIGENCE.....	174
VIII. DEPARTMENTAL NOTICES.....	175

ADVANTAGES OF SUPERSEDING SCHOOL SECTION DIVISIONS, AND ESTABLISHING TOWNSHIP BOARDS OF EDUCATION.

We are glad to observe that there has been a movement in various parts of the country in favour of the Township Board system of schools in preference to that of the present isolated, expensive, and disjointed system of School Sections.

We have collected, and insert in this number of the *Journal*, the opinions and recorded experience of several distinguished and active friends of education in the neighbouring States on this subject. They will well repay perusal, for they deal with a practical subject, and in the light of their experience, we shall be able to see our way the more clearly to the adoption of a township system in our Province under the authority of the 14th section of the School Act passed last year.

We also insert an extract from a letter published in a local paper by D. J. McKinnon, Esq., Inspector of Schools in the County of Peel, in which he discusses some difficulties which are in the way of carrying out the township system, and suggests a practical way by which these difficulties may be removed.

FORMER PROVISIONS IN OUR SCHOOL LAW ON THE SUBJECT.

Ever since 1850, there has been a provision in our School Acts for the establishment of township boards, as contained in the thirty-second section of the Consolidated School Act; but as that section is worded, no such board could be established unless a majority of votes in every single school section of the township was in favour of it. It has happened that out of twelve school sections in a township, the majority of the ratepayers in *eleven* of them voted for the establishment of a

township board, but the majority in *one* section voted against it, and thus defeated the wishes of the other eleven-twelfths of the ratepayers. Under these circumstances, the thirty-second section of the School Act has remained a dead letter for twenty years, except so far as one township (Enniskillen) is concerned, although a large majority of the county School Conventions, on two occasions, voted in favour of township boards. The law was in 1871 wisely altered so as to leave the question to the decision of the ratepayers in a majority of the School sections of a township. Should therefore the vote of a majority of the ratepayers in a township be favourable to a change, the municipal council of such township is authorized to form the township into one School municipality, under a board of trustees (as is the case in cities, towns and villages), thus doing away with the inconvenience of separate School section divisions and rates, and giving to parents the right to send their children to the School most convenient to them.

TOWNSHIP BOARDS IN VARIOUS AMERICAN STATES.

1. After trying the School section system for some time, Massachusetts, Pennsylvania, Ohio, Iowa, Wisconsin and other States, have adopted the township board system, and pronounce it immensely superior to the School section system. In the State of New York, a compromise system is authorized by the School Law: that is, one or more School sections can "either severally or jointly resolve themselves into Union Free School districts, with Boards of Education, having authority to grade and classify the Schools under their charge." From the Report of the Superintendent of Public Instruction for 1870 we learn that there are now 250 such united districts in the State; of them he says: "having had frequent occasion to examine the provisions of this law (*i. e.* the 'Union Free School Act'), and being somewhat familiar with its workings, I am of the opinion that it is the best School system yet devised for all localities where the number of scholars, as in villages, is sufficient to admit of thorough classification." Rev. Dr. (now Bishop) Fraser, in his Report to the English Commissioners, says: "In the State of New York, Union Schools (or united sections) appear to be the most popular and flourishing of all the rural Schools." In this Province, the township council, if the experiment should not prove satisfactory, can at any time repeal its own by-law establishing such board.

THE EXAMPLE OF CONNECTICUT.

2. The Secretary to the State Board of Education in Connecticut thus graphically illustrates the comparative effects of the adoption of the township over the School section system in that State. In order to understand the facts as stated, we have found it necessary to change the words "town," "township," and "district" to *School Section*, wherever they occur.

"The tendency to manage Schools township-wise is growing. More townships united their School sections last year than in any former one. *Once united they stay so.* At least there is no instance where a township has taken this step and after grading any of its Schools, gone back to the School section plan. Let public sentiment advance as it has done for five years, and the School section system will soon be abandoned. The people are fast learning the economy and efficiency of the township system. They see that it favours the wise expenditure of the public money, gains better and more permanent teachers, longer Schools, and helps the poorer and outlying School sections. The township system, too, lessens the frequency of tax assessments and collections. Many a School-house is going to decay because the funds requisite for such purposes would necessitate a section tax. The expense of the assessment and collection of such a tax makes too large a share of the tax itself. In most of the sections the amounts thus provided were very small. So small that it would have been wiser and more economical for the township to pay the bills. * * * Facts on this subject are better than theories. I have, therefore, requested one of the School visitors of Branford, to describe the effects of the change in that township. His published letter shows what they did, how they did it, what they gained by it, and why they voted almost unanimously 'not to go back.' It will be seen that prior to the union there was much ill-feeling in regard to School matters, that the discipline was deplorable, average attendance low, and the teachers changed generally every term; under the new system the people are better satisfied.—School Committee and teachers more permanent, Schools graded, terms lengthened, the motion made at the last annual meeting to reduce the School year from forty to thirty weeks, not receiving a single vote. The average attendance has improved twenty-five per cent. Scholarship wonderfully improved—one hundred per cent. better than it was four years ago."

THE EXAMPLE OF MASSACHUSETTS.

3. The late Horace Mann, so noted for his enlightened views on education, deprecating the district or School section system, says: "I consider the law authorizing townships to divide themselves into (School sections) *the most unfortunate on the subject of Common Schools ever enacted in the State (of Massachusetts).* In this opinion, ex-Governor Boutwell and the eminent educationist of the same State, concurs and hopes that the day will speedily be seen when every township in its municipal capacity will manage its School and equalize the expenses of education."

THE EXAMPLE OF PENNSYLVANIA.

4. The Superintendent of the State of Pennsylvania, in his last report thus explains the township system which has been established in that State. He says:—

"Each township, borough and city in this State is made by law a School district. The districts thus formed are the only ones except a small number of what are called 'independent districts,' (like our Union School section), with a single school formed out of parts of adjacent townships, otherwise badly accommodated with schools. Outside of cities and boroughs the School districts have from one to thirty Schools in them—the average being about seven Schools. * * * The State Superintendent can refuse to pay a district (township, borough, or city) its quota of the annual State appropriation, if its directors do not keep the Schools 'open according to law.'

The directors of a district are authorized by law to appoint and pay a district superintendent, and to require the teachers in their employ to hold a district institute. Each board is compelled to make an annual report to the State superintendent, through the agency of the proper County superintendent, who must approve it, accompanied by a sworn statement to the effect that the Schools of the district have been kept open and in operation according to law, and specifically declaring that no teacher has been employed during the year who did not hold a valid certificate, and that the accounts of the district have been legally settled. Failing to make such a statement, a forfeiture of the State appropriation follows.

The School directors of each county, and of each city and borough having over 7,000 inhabitants, as may choose to do so, meet in conventions triennially, at the call of the State superintendent, to choose a superintendent and fix his salary. The directors are limited in their choice of a person to fill it, to those having certain

scholastic and professional qualifications, and the sufficiency of which the State superintendent is to judge before he issues the commission. The State superintendent pays the salaries of the County superintendents, and fills all vacancies in the office by appointment."

THE ECONOMY AND BENEFITS OF THE TOWNSHIP SYSTEM.

The State superintendent of Kansas thus forcibly discusses the advantages of a township system as compared with that of School section. He says:—

"1. *Boundaries*—It will end and for ever put to rest the interminable disputes about School section boundaries, personal heart-burnings and animosities, secret malice and revenge; neighbourhood feuds and public broils engendered by this prolific source of strife and contention, will cease to exist. The law having once permanently established each township a School division, the trouble will then be at an end. There being no more boundary disputes about which the people can make themselves miserable, they can unite in building up good Schools.

"2. *School Officers reduced*—It will dispense with a large number of School officers and elections, and simplify the control and management of our Public Schools. The present law provides three officers for each School section, the new one but six for each township, thus dispensing with a large number of superfluous officers, simplifying the management, and securing uniform work in all the Schools. The petty annoyances and loss of time occasioned by so many School meetings and elections will in a great measure be avoided.

"3. *Diminish aggregate expense*—It will diminish the aggregate expense of our Schools, and establish a uniform rate of taxation. It is a fact recognized by the best educators both in Europe and America, that the number of pupils which can be taught to the best advantage by the unclassified Schools of the rural section by one teacher is about forty. Another deleterious effect of this independent School section system lies in the opposite direction; for when the number of pupils under one teacher exceeds fifty or sixty, the teacher cannot do justice to his School, and when it reaches seventy or eighty, proper instruction is entirely out of the question. If a change were made from the old system to the new, the School board could from time to time unite small Schools and divide large ones, so as to adapt them to the wants of the people, and then adapt the teachers to both: very much after the manner in which the system is administered in our larger towns.

"4. *Uniform Taxation*—Taxation for School purposes would become more uniform, inasmuch as under the present system the people in the smaller and weaker sections pay three or four times as much as their neighbours in the larger and more wealthy sections and often get much less for it, both in quantity and quality, as they are never able to employ the best teachers. In the township system, the tax is levied equally upon all parts of the township, and as the object to be obtained, which alone justifies such taxation, is the education of all the children without distinction, nothing less than an equal provision for all should satisfy the conscience of the people.

"5. *Graded or Classified Schools*—It will provide for the establishment of a system of graded Schools. This is the highest development of the free Public Schools, ever yet attained by the best educators in any country. *It is the perfection of School Economy.* The greatest superiority of city Schools over those in the rural sections is explained in the fact of the complete gradation and classification of the former. The only feasible method yet devised for grading and classifying country Schools is provided in the township system. And it will do for the country Schools what it has already done for the city Schools, in bringing order out of confusion, light out of darkness, and success out of failure.

"6. *Convenience of School location*—Townships containing a given number of inhabitants, or a certain amount of taxable property, or both, could have their primary and intermediate Schools fixed in different parts of the township, so as to be of easy access to the smallest pupils. Then with a Superior or High School at the centre, free to all between twelve and twenty-one years of age, kept open, at least, ten months in each year, the system would be complete. With such graded Schools in each township, the superior education necessarily resulting therefrom, the increased interest in the Schools, and the great economy of time and means employed in their management, would soon bring them into universal favour.

"7. *Appropriate Grade for pupils*—It will systematize the Schools and provide an appropriate grade for each child. The great bane of the old independent section system is, there is no classification; in fact, from the very nature of things, there cannot be. Every teacher well knows that the most important thing in

the organization of a School is a thorough and complete classification of all the pupils in accordance with a judicious and systematic course of study. This will require and secure uniformity of the approved text-books, improved methods of instruction and better discipline.

*“Age and Acquirements Classified—*Pupils of the same age and advancement will be placed in one grade; those older and more advanced in another—thus giving to each teacher a specific work. By this division of labour the classes will be increased in size, but diminished in number, thus enabling the teacher to devote more time to each class, and impart to each pupil more systematic and efficient instruction. The enthusiasm and excitement which a large class always creates in every School develops a corresponding zeal, energy and determination upon the part of the teacher to excel in his noble work. He labours more faithfully, and succeeds in infusing into his pupils new life and vigour—prompting them to higher aspirations and nobler effort in their studies. Thus the School is developed into the pride of the neighbourhood, and a blessing to the people.

*“6 Efficient Supervision—*It will secure a more efficient system of School supervision. Under the present system, the time of the County Inspector is largely occupied in organizing Schools, classifying pupils, changing union section boundary lines, cutting off here and adding on there, in the vain hope of finding some golden mean of fixity. Under the new system the County Inspector would be relieved from most of this unprofitable work, and would be able to spend his time more exclusively among the Schools, looking after and fostering their best interests, and prompting teachers and members of the School boards to the full performance of their manifold duties. With the increased responsibilities the School board becomes a supervisory committee, vigilant and active, ever watching with zealous care the sacred trust confided to them in securing for every child in the section the best education possible.

*“7. Better Qualified Teachers—*It will secure for our Schools better qualified teachers, with better compensation. As the number of pupils in each School can always be kept up to the maximum, it necessarily follows that with a graded and classified School, one teacher will do the same work and in a superior manner than two, and in many cases even three or four, are doing under the present system. We confess this proposition, at first sight, appears somewhat paradoxical; yet when we remember the vast superiority of graded over ungraded Schools, it does not appear so very absurd after all. In fact it is true—and a small portion of the money thus saved, in addition to the present compensation of teachers, will command the best skill. Increased salary will always bring better qualified teachers, consequently better Schools and better education for the children.”

AMENDMENT TO OUR OWN SCHOOL LAW RELATING TO TOWNSHIP BOARDS OF TRUSTEES.

One or two difficulties have been experienced in giving effect to our school law on the subject.* These difficulties have been pointed out, and a mode of overcoming them suggested by one of our Inspectors (D. J. McKinnon, Esq., of Peel), as follows:—

“I have expressed my belief that under the township system, schools might be so placed that every child in the Townships of Toronto and Chinguacousy would be within two miles of some school. This might be done by planting schools ten lots apart one way, and four concessions the other, with one in the centre of each (almost) square, thus giving two concessions ($1\frac{1}{2}$ miles) as the maximum distance to be travelled by any child.

“But here a difficulty meets us at the outset in the shape of several really good school houses already—many of them lately—built, and which it would be most unreasonable to close merely because a little out of place. I have found, however, that by slightly modifying the original scheme these schools may be all brought in by leaving only one corner of either township (7 lots), more than two miles distant from some school—children from the same corner having now to go more than four miles.

“We have at present 46 sections in Toronto and Chinguacousy, of which 9 are Unions, and supposing the burden of five of these to fall upon these two townships, there are still 41 left. Besides, there was presented to the county council at its last session a petition from certain farmers in Chinguacousy, showing that some of their children had from four to five miles to walk to school, and praying for a new section. Should the wish of these ratepayers be granted, there would be 42 schools to support under the present

system instead of 37 under the township plan. Should ratepayers in each of the five sections in Chinguacousy, whose outskirts lie three miles or more from their respective school-houses take the same course, it would, by multiplying the number of schools, very materially increase taxation in that township.

* * * * *
“But even reckoning the number of schools to be kept up under the present system as only 42, there would still be five more than under the township plan; and counting the cost of maintaining each school in the future as \$500 per annum (interest on value of site, building, furniture, &c., say \$1,500, at 7 per cent. \$105; fire-wood, \$20; repairs, prize books, &c., \$15; and salary of a teacher, \$360), the amount saved on the five schools would be \$2,500, or \$60 a piece to each of the 37 schools, and \$280 over for ‘contingencies.’ That is to say, it would cost the people exactly the same to have a \$360 teacher under the township system as a \$300 man at present; or rating teachers according to salaries, the efficiency of the schools would be increased by 20 per cent.

“But here I anticipate an objection. If the number of the schools were reduced to 37, would not the increased attendance at each make the work too great for 37 teachers to overtake? I answer decidedly, no, for the aggregate attendance of the townships for the first half year of 1871, was only about 1,400, or less than 38 a piece for 37 teachers, while for the second half it was some 50 less, so that even if the attendance should increase by one-fourth on account of the greater facilities afforded to children who are now at too great a distance, it would still fall below the 50 allowed to each teacher by law.

“Another great advantage of the township system would be the equalization of taxation. I shall at this time merely say, that the present system is most unjust, some sections in the county having double the amount of ratable property that others have, and consequently requiring to pay each man less than half the taxes for the same class of school.

“But what about the new and good houses already built? Will those who have paid some \$40 apiece for school-houses in their own sections be required to turn round and pay their (say) \$20 additional for similar buildings in other parts of the township? This would assuredly be most unfair, as men in sections that have been enterprising enough to put up expensive houses would have paid some \$60 for schools belonging to the whole township, while their more canny neighbours whose present schools were built some 30 years ago, would get off with \$20! But fortunately the remedy is simple. If A. and B. two merchants in the dry goods trade, having stocks valued at \$7,000 and \$3,000 respectively, agree to go into partnership on even terms, with a capital of \$20,000, on the understanding that their present stocks shall be the property of the firm, it would be absurd for B. to say, ‘We have now \$10,000 between us, and the \$10,000 more required will be just 5,000 apiece, because, you know, we’re equal partners.’ ‘No.’ A. would say, ‘I’ve \$7,000 in now, and you’ve \$3,000, so I shall put in \$3,000, and you \$7,000, and then we’ll be on even footing.’ And so may it be arranged with existing school property. Let the township board, if formed, buy up all the school property of the various sections at a valuation, so that the value of such property shall be deducted from the building taxes of those who have paid for it, and thus even-handed justice done.

“But what of the fairly good school-houses—those not quite coming up to the requirements of the law, but yet too good to throw away entirely? Make them into teachers’ residences. A partition or two run through, and a kitchen attached, will convert the most of them into very comfortable little houses, and this would be by no means a useless investment, for fully one-third of the teachers at present engaged are married men; and I have known of several instances during the past year where a good school has been refused by a good teacher simply because he could not get a house.

“Of course, even if township boards were at once established we couldn’t expect to see all these changes at once. New schools would have to be built no sooner than they will if no such change take place, but when built they would be in the most convenient places, and every child could at once be allowed to go to the school nearest him. After all, it would perhaps be hardly worth while to make such a change for the sake of saving a couple of dollars a year to each farmer, but for the sake of the little ones who now must wait till ten or twelve years of age before they can walk their three miles or so to school in winter, it is worth while to go to some trouble.”

In a memorandum addressed to the Government last year on some amendments to the school law, the following suggestions were made:—

“The 14th section of the School Act of 1871 might be amended so as to provide that school sections which have erected good school-houses of a certain valuation to be determined, should be exempted

* The same difficulties, in giving effect to the law, are, no doubt, experienced by other Inspectors, so that the example and illustrations here given, may be taken as a fair specimen of similar difficulties in other parts of the Province.

from taxation for new houses in other parts of the township where this had not been done. It might be well to consider whether it would not be better further to amend the law, so as to authorize two or three of the existing school sections (according to the size of the township), to unite and elect one member to the township board, to retain the existing boundaries (subject to alteration by the board) for taxation purposes, but to abolish them so far as they now restrict the right of each ratepayer to send his child to the school of the section in which he pays school rates."

THE TOWNSHIP SYSTEM VERSUS THE SCHOOL SECTION SYSTEM.

State Superintendent Johnson, in his last report, takes occasion to urge anew, upon the people of the State, the great advantages that would be derived from the abolition of the district system and the adoption of the municipal system, by which the schools of a town would be placed wholly under the control of the superintending school committee. Some extracts which he gives, from sources entitled to great respect, put the matter in a very clear light, and ought to induce many of our towns to make the change, which would greatly and speedily improve their schools, and render them comparatively less expensive than at present.

The following enumeration of some of the prominent obstacles which are in the way of the greater efficiency of our schools under the district system is worthy of attentive studying. They are real and not imaginary.

1. Total lack of our insufficient supervision.
2. Constant change of supervision.
3. Poorly qualified teachers.
4. Constant change of teachers.
5. Lack of interest in schools on the part of patrons.
6. Employment of relatives and favourites without regard to qualifications.
7. Too small schools in many districts.
8. Too short schools in small districts.
9. Employment of immature and incompetent teachers in small districts.
10. Poor school-houses.
11. Irregular attendance.
12. General lack of facilities to aid the teachers.
13. No schools at all in many districts.
14. Lack of proper qualifications.
15. Pupils study what they choose, and not what they ought.

These twice seven and one plagues of our common-school system will be recognised by every one who has had any experience in connection with the public schools of the State.

After discussing at considerable length the reason for a change to the town system, the following are given as some of the desirable results that would be realized by abandoning the district system, and placing the schools under the care of the town:—

1. It would secure just as many schools as the necessities of the community demand, each being an integral part of one central organization, and adapted to the wants of each individual.
2. It would dispense with a large number of school officers.
3. It would establish a uniform rate of taxation.
4. It would furnish more uniform and equal advantages and privileges to every citizen.
5. It would allow the child to attend school where his own interests would be best conserved, with no restraint save what the general interests might require.
6. It would prevent strife about district lines.
7. It would diminish the aggregate expenditure for schools.
8. It would secure a more efficient system of school inspection and supervision.
9. It would secure permanency of supervision.
10. It would secure greater permanency of teachers.
11. It would secure a better class of teachers.
12. It would secure better compensation to competent teachers, and less employment for incompetent ones.
13. It will secure better school-houses.
14. It will secure greater facilities to teachers for reference and illustration.
15. It will enable towns to establish graded schools.
16. It will secure uniformity of text-books in the same town.
17. It will result in more uniform methods of teaching.
18. It will secure the establishment of a course of study, and will tend to keep pupils longer in school.
19. It will secure to the State department more reliable statistics.
20. It will insure schools in every district, and prevent a bare majority from depriving a respectable minority of school privileges.

21. It will tend to diminish neighbourhood quarrels.

22. It would ensure the employment of fewer nephews and nieces, sisters and sisters-in-law.

23. It would insure a larger aggregate of interest on the part of the community in each school.

24. It would render possible competitive examinations.

There is no gainsaying the force of the argument presented by the above points, all of which are susceptible of the clearest proof and demonstration. Nothing but apathy and prejudice can prevent a reasonable person from seeing that they are conclusive in favour of a change. Are those persons who doggedly cling to the district system, aware of the following fact? That of those towns in Massachusetts and other States, which have abandoned the district system, it is very rare that one, after a fair trial, has any inclination to return to that system. The advantages of the town system are too apparent and too important to be lost when they have once been attained and enjoyed. A word to the wise, &c., &c.—*Maine Journal of Education*

I. Papers on Education in Various Countries.

1. SCHOOLS OF EUROPE AND AMERICA.

Hon. B. G. Northrop, in a recent address, thus contrasted them. There are many features in which foreign schools may learn from us; but in others they are our superiors. One advantage in our favour is the general employment of women in teaching. In foreign schools it has been the school-master almost exclusively.

With respect to the points of superiority, the first that strikes one is the earlier and more thorough gradation. In our country, especially in the rural portions, the schools are often enfeebled by separation, when they might be strengthened by union. Then they have such admirable, thorough, universal supervision carried down to the lowest school and up to the highest. This is perhaps their best feature; and the result is that the schools are so good that the attendance increases even where the bishops deny the sacraments to parents who send their children to school. Where the schools are made excellent, they need not fear the ban of any church preventing attendance. In Rome the new system gains ground as the schools improve. At the anniversary of its adoption, a grand school celebration was held; an amphitheatre was erected, and five hundred children drilled for a chorus; the conscript fathers were present; and everything combined to make a gala day, closing at night with an illumination at the Coliseum. The whole produced a profound sensation, and the permanence of the common schools is settled. These results were produced in a great measure by their careful supervision, directed by one controlling mind. In Vienna, too, and indeed in the cities generally, the same feature is seen; and the results are manifest.

It is with some surprise that the American educator returns home, and finds this great city of Philadelphia without a superintendent. Your grammar and high schools deserve commendation, but I wonder at the inequality which is observed in the other departments—one ward having a good principal and thoroughly drilled assistants, and in the next the primary schools being quite unworthy of you. This could not be under an efficient superintendency, which would bring all up to a uniform excellence. No city in the country has abandoned the superintendency after trying it, and in many it has produced marked improvement.

Our schools too often fail by a most meagre development of language and power of expression; and here the Europeans excel us. The children are required to commit the gems of the language, and thus the memory is trained and a high standard of taste created. The schools of Germany and Switzerland especially excel in this respect. One and often two modern languages are taught in every school, and the children are often more proficient in all three languages than ours are even in their own.

Then they give more attention to history. This may be partly because on every hand they see memorials which link the present to the past. The sentiment of patriotism is developed; in Germany loyalty to the emperor; in Switzerland, love of country. The Swiss motto, "One for all, all for one," is thus graven deeply in the hearts of the people. The Prussians understand that "what you would have in a nation's life you must put it into its schools;" and you hear "fatherland" everywhere. Technical education is provided for; almost every trade has its school, and they contribute largely to the thrift of Germany and Switzerland. The universality of instruction in drawing is a marked feature; and I urge upon all superintendents and those in authority to have drawing introduced alongside of geography and arithmetic.

I found the compulsory attendance produced no discontent among the common people; they complained of conscription, but never

of compulsory education; they would re-enact it themselves if abolished—the law represents the sentiments of the people. They are superior in their universal singing; one of its results is found in your music to-night, and music has been an important element in developing the German character. They are strong in object teaching—oral instruction—independence of text-books. The school authorities practically dignify labour; in the Geneva high schools the girls are taught to sew, and to run the sewing-machine. They have also thorough training of teachers in normal schools, and understand the advantage of permanence in the relation of teacher and school. In the French Schools, the admirable posture deserves imitation; it is one of the best guards against pulmonary consumption. Altogether, there is much that we might profitably study and copy in America.

DEFECTS IN AMERICAN SCHOOLS, AND REMEDY.

Allen read a paper before the Association, Prof.

1. The conditions of child-life in the school-room are not properly considered, and hence no suitable basis can be established on which to begin the work of school instruction.

2. No natural order of studies or subjects to be pursued has been established. Hence very many subjects and branches of study are taken up at improper periods, some of them entirely useless, to the exclusion of those that are highly essential.

3. No systematic method of training the perceptive faculties has been adopted. In fact, we may almost conclude from what we see daily in school-rooms as we travel over the country, that these faculties are not to be taken into account in the process of primary instruction. As a result of this, children grow up to be men and women in blissful ignorance of very many of the most common and practical things in daily life.

4. The elements of our language are among the first lessons given to a child on his entrance into the school-room. Instead of words which represent the ideas and things, meaningless letters and sounds are substituted. Books are used too soon in primary grades, and, in fact, I may say used too much in all grades. Oral spelling is taught.

5. Physical science is almost wholly ignored in primary schools. 6. The hours of confinement in the school-room are too many. Children are required to sit while in school, when they ought to be moving about or standing at blackboard, maps, charts, or working with apparatus.

7. Inexperienced, cheap, and consequently poor teachers, are generally employed for the primary grades.

These are among the most glaring defects in our present plan, though not all. Yet I trust there is a sufficient number to form the basis of an interesting discussion.

The legitimate fruits of these defects may be found in irregularity of attendance, truancy, absenteeism, a hatred of school and books, a distaste for learning, and the much-to-be-regretted fact that the great bulk of common school pupils leave the schools at or about the age of sixteen.

The "new departure" consists—

1. In dividing school life into two periods, known respectively as the how or fact period, and the why or philosophical. Instruction during the first period consists in giving processes, familiarizing tables, acquiring rapidity and accuracy in performing, and should be wholly, or nearly so, conversational.

2. As all studies in the school-room may be classed under the three heads of language, mathematics and natural science, and as the elements of all physical and natural science should be taught to the youngest child that enters the school, every child should have daily one lesson in language, one in mathematics, and one in science.

3. Instruction should first be given in how to properly use the senses, that they may convey to the mind accurate knowledge, properly certified to or tested. Very much attention should be given to securing greater accuracy of the perspective faculties.

This embraces three studies, all that any pupil at any time of life ought to pursue. In connection with this, drawing, writing and music come in, not as studies, but as changes, which is, in the true sense of the word, rest.

4. The spoken instead of the written word should first be taught. No attention or time should be given during this first period to teach the letters or figures. Words should be printed or written (better the latter) simply as forms or as pictures are made. These may be taken from wall cards, or from lessons put upon the board by the teacher. As spelling would not be used did we not write, and as we use it properly only in writing, spelling should not be taught

until writing is learned, and oral spelling should never be used as a process for teaching spelling.

As words should be taught before letters, the time will not be long before the letters and figures will be known by the pupils, and you will have been saved a vast amount of vexatious, tedious, and patience-trying work, and the pupil will have been saved that rough, stony and thorny path over which the most of us have trodden in sorrow. They will have picked up these little waifs or integral parts of language the natural way.

If we desire to teach language efficiently and correctly, we must bear in mind that habits of speech are caught much more easily and readily than taught.

5. Physical science should be taught by bringing the subjects and things of which they treat as far as possible into the presence of the child. Let his eyes see and his hands feel the subjects and things presented. In doing this every school-room becomes a miniature museum. I should like to exhibit such an one as I now have in mind, collected entirely by the children of the school. In thus studying these subjects the child is brought in direct contact with the material with which he daily meets and has to do with in after

6. No primary school-rooms, as well as his knowledge of the day than four hours, and the rooms should be standing or sitting, as he may desire. Children thus situated, it is found, seldom sit. This is nature's plan.

7. None but experienced teachers and those of much learning and culture, ought ever to be placed in primary schools. Consequently the primary teacher ought to have a higher salary than in any other grade.

3. A NEW SCHOOL FEATURE.

In Denmark children may attend school one part of the day, and work the other part. A school-house in Copenhagen is furnished for a thousand children; one session is held in the morning, a thousand attending; in the afternoon a second thousand attend, both schools being under the same general management. This system secures a happy union of bodily and mental exercise. It is profitable whether considered in an intellectual, moral or pecuniary point of view, and is based on sound principles. Experience proves a few hours of mental labour better for the educational progress of the student, than of a whole day of forced application to books, as was the custom in early times.

4. COMPULSORY EDUCATION.

While there are 5,660,074 illiterates in the United States, there are but about 3,637,000 of adult illiterates; and the latter seems the fairer way of stating it, as many persons learn to write between the ages of six and twenty-one. Only 1,148,000 of these are in the North, and of these 756,000 are in the Pacific States, thus leaving 583,000 in those States where our school system has had its best opportunity for development. In the Northern States there are 690,000 foreign illiterates; if only half of these are in the States referred to, (and doubtless there are many more,) then the number of native adult illiterates dwindles down to 238,000, or less than one to each 100 of their population. Making a fair estimate of the number of these from the South, both coloured and white, and there remains less than one illiterate to each 300 of those who have had the advantages of our free schools. Surely this is not a disgraceful record when compared with other countries, and especially with the results of the compulsory law in Prussia; for in this country, after an enactment compelling children to attend school between the ages of six and fourteen had been thoroughly tried for 128 years, there were found to be for each 100 inhabitants, one young man between the ages of twenty and twenty-two who could not read and write. What would be the proportion were older persons and females included?

History proves most conclusively that the leading nations of Europe do not base their power on any compulsory system of education, but on the superiority of their teachers and schools. Prussia affords a striking example of this, as she tried such a law for almost 100 years, and, meeting with so little success, determined to devise some plan which should prove more effectual, hence established a sufficient number of Normal Schools to educate all who wished to teach, and from their organization dates that high culture which has astonished all Christendom. With these are connected preparatory departments, in which applicants are tried for six months, at the end of which time only those who have shown considerable

ability are allowed to enter the Normal department; here they must remain three years, and not only finish their course of study in an honourable manner, but also prove themselves successful teachers, or else they are not permitted to take charge of a school. Any teacher who fails to make sufficient advancement, either in skill or culture, is required to re-enter the school for further instruction. Thus the Prussian instructors are only the best of the best, and no person is allowed to teach either a public or private school without the same rigid preparation. There are four cantons in Switzerland that have never had any compulsory law, and yet education in them is said to be as nearly universal as in any of the others; because, like them, they employ none but very superior teachers.

But it is stated by good authority that Holland has accomplished what no other country ever did, as she has not one adult citizen who cannot read and write. Yet she has never had any laws compelling school attendance, but her grand success is the result of having teachers and schools superior even to those of Germany, Prussia, and Switzerland.—*M. Embree, in American Education Monthly.*

The new school law of England permits all local Boards to enforce attendance. Public sentiment throughout England is now changing rapidly in favour of making compulsory attendance national and universal, instead of permissive. As one of many illustrations of this change, Rev. Canon Kingsley, formerly favouring non-compulsion, now advocates the compulsory principle.

The Motto of the National Educational League, of which George Dixon, M.P., is President, is "Education must be UNIVERSAL, UNSECTARIAN, COMPULSORY." At the late General Conference of Nonconformists, held in Manchester, January, 1872, and attended by 1,885 delegates, there seemed to be great unanimity in favour of enforced attendance. This assembly was as remarkable in its character as its numbers. The argument of Mr. Jacob Bright, M.P., on this subject was received with great applause. He said that the best part of the Education Act, that which is worth all the rest put together, is the permission to compel attendance, which should be the absolute law throughout the entire kingdom.

The labouring classes are not opposed to such a law. They would welcome it. In England the working classes are asking for a national compulsory system of education. By invitation of A. J. Mundella, M.P., I attended the National Trades-Union Congress, held at Nottingham for the week beginning January 8th, 1872. That body seemed unanimous in favour of compulsory attendance. One of the leading members, an able and effective speaker, said that in large and crowded assemblies of workmen he had often distinctly asked: "Do you agree with me that we want a national compulsory system of education?" and not a dissenting voice had he ever heard from the workmen.—*B. G. Northrop, in Christian Union.*

6. WHY DON'T SOMEBODY DO SOMETHING FOR THE SCHOOLS.

What shall we do? That's the question, and a deep one too. What shall we do to elevate and push forward the educational standing of the people? What shall we do to render our schools what they should be? Shall we content ourselves with drawing out an acquiescence, "Something should be done," or languidly inquiring, "Why don't somebody do something?" Let me whisper it in your ear, kind reader—for I would not like to say it out loud, for fear of offending some lukewarm, hypocritical friend of progressive education—this is about all the great mass are doing. Yes; why don't somebody do something?

What shall they do? Let us consider a moment. First, I should say, *organize*. In union there is strength. Organize for offensive, defensive, and progressive purposes. Organize as a whole State, with subordinate organizations in every county and town. There are live men in all sections. They will band together and accomplish good if the right impetus is given. We fear not the triumph of ignorance and retrogression, if we choose our ground, fortify our camp, and keep our ranks recruited. It is the demoralized army that is easily overcome. It is the unskilful hand that gathers the poor harvest. We must initiate the aggressive, and "Push things."

Keep it before the people. Shame them out of poor school-houses, scrimping dealings toward educational enterprises, and antiquated usages. Talk, write, prove, urge, press, worry them up to duty. Stick-to-it will accomplish wonders. Induce, lead, entice, entreat, and drive them into the better way. Let them see

we are irrepresable—that we won't "down at their bidding," but are quiet fellows when we get our ends answered by their discharge of duty. This is the only way we may hope to make reform. We must go ahead, keep ahead, drive ahead, live ahead, and die ahead, then somebody will do something.

We have missionary work, plentiful and pleasing, to do for common-school education. Every district, from Kittery Point to Quoddy Head, is a fruitful field for labour. Every town, from Fort Kent to the sea, wants colporteurs of progress leaving tracts, and making tracks, that shall point toward the highway of reform. Pioneers to fell the forests of darkness and ignorance, clear the fertile fields of usefulness, and to sow the seeds of wisdom, whose crop shall be abundant. Here is a chance for somebody to do something!

Live it, talk it, act it, develop it. This is the way, the only way, and the true way. Don't wait for "somebody to do something." Perhaps somebody is waiting for you, and this through *what?* You causes present *formid...* *and*, mind you, look not back; fix your eye on the goal and the promise; fix your eye on the standard of progress and turn a straight furrow. We have team enough when we get them all hitched on! Horace Greeley says, "Plough deep!"

The opposition received a partial triumph the past winter. Let us be prepared to regain lost ground another winter, and push back their lines till we occupy their camp and rout them completely. Let our whole line be put in motion for a general engagement and decisive charge. We want no forlorn hope, singled out for daring deeds, while the rest are "waiting for somebody to do something!"

If we are true men and not mercenaries, let us do our whole duty. We have need to work; it is time for action. We need to have thorough, minute knowledge of the enemy's forces, country, position, and strength. We need to study well the approaches, and take advantage of all weak points and unguarded places; get our heavy artillery into position, and be prepared always for a forward movement—never for retreat. Our starry banner, with its motto, "ONWARD," shall be planted victoriously over many a hard-won field and fortress of good-enough-as-it-is. Forward!—*J. W. LANG, in Maine Journal of Education.*

7. COLLEGES FOR WOMEN.

The late Miss Sophia Smith, of Hatfield, in Massachusetts, bequeathed by will a considerable sum for the establishment and maintenance of an institution for "the higher education of young women," designed to equal in the advantages afforded by it the colleges for young men. The trustees named in the will have purchased an eligible site in the beautiful town of Northampton, six miles from the colleges in Amherst and an equal distance from the Mount Holyoke Seminary. They have cash funds, including \$25,000 given by the town of Northampton, amounting to \$358,000. They are now seeking the means to erect the necessary buildings and the art museum without encroaching on these funds. The scheme which the Board of Trustees have adopted is a large one. The study of Greek and Latin is to be pursued as extensively as in colleges for young men; not less attention will be paid to modern languages; more time will be devoted to English literature and to aesthetics; the physical sciences will be taught so as keep pace with the scientific and material progress of the age; probably less attention than in other colleges will be given to mathematics, but more to ethics and metaphysics; facilities are to be afforded for the pursuit of special studies, and, to sum up, "the system of training will be such as to fit young women to become teachers, not only in our Sabbath-schools, Bible-classes and mission-stations, but also in our highest institutions of learning; to become writers, also, not only of articles for the daily and weekly Press, but also of standard books." This is a grand scheme, which it is safe to say will never be accomplished until the present available funds are increased several fold. We should suppose \$2,000,000 in hand would be as little as would afford reasonable promise of its accomplishment in this generation.

UNIFORM FOR SCHOOL-GIRLS—WHY NOT?—A writer in *Scribner's Monthly* does not know "why it is not just as well for school-girls to dress in uniform as for boys. There are many excellent schools in England where the girls dress in uniform throughout the entire period spent in their education. By dressing in uniform the thoughts of the pupils are released from the consideration of dress; there is no show of wealth, and no confession of poverty. Girls from widely separated localities and classes come together, and

stand or fall by scholarship, character, disposition and manners. The term of study could be lengthened by the use of the money that would thus be saved; and while a thousand considerations favour such a change, we are unable to think of one that makes against it." These reflections are suggested by the fact that in some of our schools the mere item of dress for young ladies is often over \$1000 a year.—*American Educational Monthly*.

OXFORD UNIVERSITY celebrates this year the 1000th anniversary—probably fabulous—founded by King Alfred.

SIR CHARLES LYELL is seventy-five years old. He graduated at Oxford, and commenced studying law, which he soon forsook for geology.

WOMEN are now admitted to fifty American colleges.

8. LINDSAY SEPARATE SCHOOLS.

Under the fostering care of the Rev. Mr. Stafford, Lindsay can boast of the best Separate Schools in Ontario. In consequence of these Schools have been able to compete successfully with those of the Public Schools. It speaks volumes for the Separate Schools of Lindsay when we state that no less a sum than fifteen hundred dollars *per annum* are paid for the salaries of Teachers.

9. SUNDAY SCHOOLS IN CANADA.

We suppose that in these days there is no question as to the utility of Sunday Schools, or as to the success that has attended their efforts. The consensus of opinion in every branch of the Church demonstrates the desirability of these institutions. All denominations are agreed that the surest way to spread the truths of the Gospel is by taking hold of the young and inculcating in them religious habits, whilst the vast numbers of children that each Sunday attend them are a convincing proof of the success that has attended their labours. It is impossible that so large a number of children can be gathered together week by week to listen to Christian teaching without a great proportion of them being benefited thereby; and if further proof were needed, the fact that the membership of every Church is largely recruited from the ranks of the Sunday School, would supply it.

But at the recent Sunday School Convention, where the thoughts of those present were naturally directed to the question, how they can be improved, how their appliances can be increased, and the success attained added to, it was suggested that one principal method in which that success could be increased was by interesting, to a greater extent than at present, the higher classes of society in the work of the Sunday School. It was complained by some of the speakers that this portion of society pay but little attention to the Sunday Schools of the Churches to which they belong, and leave the work to be carried on by persons of inferior culture, and smaller influence. This view was at the Convention considered open to question, and it was contended by some that at present the higher classes did take a fair share of the labours of, and incident to, Sunday Schools. An incident that occurred at the recent Church Congress held at Leeds, England, where the flower of the Church, both clergy and laity, was assembled, serves to confirm this latter view of the question. A debate on the subject of Sunday Schools formed one of the most interesting features of the Congress, and the fact that the question was introduced by a paper written by the Lord Chancellor (Lord Hatherley) proves that many of the most eminent of the laity take a warm interest in its discussion, that in England, at least, the upper classes do feel an interest in, and share the labour of, the Sunday Schools. Lord Hatherley, who is well known as an earnest and devoted Christian man, has been a Sunday School teacher for 35 years, and throughout that long period he has devoted himself to the labour incident to that office with quite as much assiduity as he has to the more onerous duties of his position as an eminent judge. We know that in England many similar instances could be easily found, and we believe that a similar result would attend a careful inquiry into circumstances in this country. Should an inquiry prove the contrary, the example set by the noble and learned Lord ought to, and we hope will, prove contagious.—*Montreal Gazette*.

II. Papers on Practical Education.

1. SCHOOL READING IS NOT READING.

Although about one-half of the teacher's time in the school-room is devoted to hearing the classes read, yet the results produced are most unsatisfactory, and good reading has become to be almost

one of the "lost arts." There is evidently a defect somewhere, either in the method of teaching followed, the text-books used, or the qualifications of teachers employed.

To be able to read well implies not only a correct articulation, but also a thorough understanding of the meaning of the words read. Attempting to read without this knowledge, is like pronouncing the words of another language without understanding their import. If a correct knowledge of the meaning of words is essential to correct reading, why do not teachers give this subject more attention? Why do we see so many classes in our schools called into the room, allowed to read round once or twice in a monotonous, sing-song drawl, and then sent back to their seats without a comment being made or a question asked by the teacher? Want of time may be one reason, and probably a true one, in schools where the classification is not good. In such schools the classes should be reduced in number, and thus time would be gained for the proper instruction of the remainder.

In many cases teachers are not properly qualified to teach this branch, and consequently are unable to awaken an interest in the little time. The character of the readers used is also a matter, etc.; are not interesting to children. From Shakespeare are required to read them; yet such extracts constitute the larger part of the readers used.

A reading book should be an instruction book, instructing the children in matters of every-day life, those things which come under their observation and with which they are familiar. The plants and flowers which grow in the fields; the curious forms and habits of insects; the animals, pebbles, and birds; the stars which twinkle at night, are all objects of interest to children. The higher English branches of study, such as natural history, human physiology, physical geography, etc., contain many useful things which children can understand, if presented in a simple and proper manner.

Introduce books containing such matter into our schools, and secure competent teachers, and the exercise in reading will become the most interesting and instructive one in school; and the scholars will gain skill in reading and become well grounded in the rudiments of the sciences, in less time than would be required to learn either by the old method.—*Eliza H. Merton, in the Maine Journal of Education*.

2. THE NEGLECTED LUXURY OF SPELLING.

Dickens in "Our Mutual Friend," when describing the number and variety of begging letters which, upon coming into his fortune, the owner of Boffin's Bower received, remarks with one of his inimitable strokes of humour: "Among the correspondents were several daughters of general officers long accustomed to every luxury of life except spelling." Now, I fear that the sarcasm with which our English author demolishes at a blow the false pretences of these young ladies would not by any means secure the like conviction in our country, for I have known bona fide daughters of general officers in America, who, if their title to the position depended upon correct spelling, would disgrace it every time they took pen in hand.

This was not so in the old time before us. Our grandmothers knew how to spell. Among their school exercises, besides the ordinary daily lessons, there were what might be called *field days* for the practice of the then honoured art. The scholars dividing into two parties ("choosing sides," as it was called), were ranged in lines facing each other. The words were then given out, and the lively contest of "spelling down" began. Each one who missed a word was obliged to fall out of line and take his seat, until by degrees only a few champions remained on either side; the high honour of standing alone occasionally falling to a single individual. Of course the match was won by the side which exhibited the greater number left standing when the lesson was finished. This was only one of several devices to secure attention to this humble and elementary, yet most important branch of education.

But now, alas! in the matter of orthography we have fallen upon evil days. The good practices above described exist to some extent still, in a few country schools, perhaps, but in general they are falling more and more into neglect. Much of our modern culture is merely for show, and under the thin tinsel of supposed acquirements in other languages lie strange deficiencies in the knowledge of our own.

In our schools, generally, too little importance is attached to the study of orthography. No pains are taken to secure its being taught; and, in fact, one would think, to examine the programme of studies, that now-a-days children had grown so clever that what used to take time and labour to teach would come to them by a sort of instinct.

In support of the assertion that attention to spelling is woefully

neglected in these days, I will cite the following fact: Within a week I have received two letters, the one from a middle-aged country woman, living at an obscure place called Bean's Corner, in the State of Maine. She has probably but the slightest pretension to what in these days is called education, and yet her letter has not a single misspelled word in it. The second letter alluded to is from a descendant of one of the oldest and best families in America, a lady of many accomplishments and high culture, and yet her letter exhibits several gross mistakes in the spelling of words of common every-day use.

Apocryphal of this subject, a friend tells me that he knew a young man of excellent family and social standing, who was engaged a short time since as a book-keeper in a retail grocery. His penmanship was admirable, his arithmetic adequate to the position, and yet "eggs" were transformed by him into "edges," "pails" into "pales," "pepper" into "peaper," with many other equally atrocious perversions of orthography, until the end of the first week "spell" the notice that his services would not be required.

The same friend informed me once attended a course of lessons in penmanship by one of the foremost teachers in this country, whose copies were so often misspelled that they furnished a fruitful subject of ridicule on the part of the pupils.

Perhaps the following Lament, found in the portfolio of a maiden aunt, may amuse your readers, and serve as an appropriate ending to this "scold" about the wretched spelling of these degenerate days:

My dear nephews have all passed through college,
And their sisters of school honours tell,
But, alas! amid all their fine knowledge,
There's not one of them knows how to spell.

You would think Jim as learned as a Rabbi,
His collection of books could you see,
Yet he writes home from France that an "Abbey"
Is teaching him French "à Parreé."

Pretty Fan, who has gone on to Venice,
Into raptures at everything flies,
But especially glowing her pen is
When describing the famed "bridge of size."

With Donald and Duncan, twin darlings,
Spelling fares no whit better I fear;
For they write me that soon at McParlins,
They will enter a "buisness career."

Yet these are all children of mothers,
Who in days that are gone would surpass,
In the triumphs of spelling, all others,
Standing off'nest the head of the class.

3. PRIMARY LESSONS IN BOTANY.

I would introduce the study of botany to a class of pupils in this way: Taking a simple plant in my hand,—a year-old apple-tree would be a good specimen,—and presenting it before the class, ask:

Teacher. "What is this?"

Pupils. "A stick; a switch; a little tree; a plant." (I would endeavour to bring out the latter answer, *plant*.)

T. "What is this?" (pointing to the root.)

P. "Root."

T. "What is this?" (touching the axis or stem.)

P. "Stem."

T. "What are these?" (pointing to the leaves.)

P. "Leaves."

T. "What is this plant made up of?"

P. "Root, stem, and leaves."

T. "How does the root differ from the stem?"

P. "The root grows under ground and the stem above ground."

T. "Do roots sometimes grow above the ground? The roots of the corn are above the surface. Have you seen them?"

T. "Do stems grow under ground sometimes?" Here speak of the plants that grow under ground, such as the potato, etc.

T. "Do you see any joints on this root? Are there any leaves on the root? Here call attention to the place of the leaves. Strip off some of the leaves and then show the place on the stem where the leaves grew, and compare the stem thus stripped of leaves, with the root, and show that the stem grows by a regular succession of joints, while the root has no joints, no leaves, and no place for leaves.

The characteristics of leaves, as differing from root and stem, are easily made.

The *plant* is a type of the vegetable world, and the plant consists of root, stem, and leaves. The root, the stem, the leaf, may each assume a great variety of forms.

To illustrate: Take a leaf from a book. Let the pupils see you tear or cut it from the book.

T. "What is this!"

P. "A leaf."

T. "What is this?" rolling the paper in the form of a cylinder or cone.

P. "A leaf."

Then let the teacher tear or cut the upper margin of the leaf into lobes, and then roll together. Then roll the paper into a solid cylinder, then dip it into ink, or some colouring matter; talk of its being colored, red or blue or yellow, if you do not actually colour it,—continually asking, as you make a change in the form or colour, "what is this now?" Thus develop the fact that the leaf may assume a great variety of forms and colour; but it is a *leaf* nevertheless. On the stem you may find a bud; present this to the class and ask:

T. "What is this?"

P. "A bud."

Let the pupil examine it; ask him to pull it to pieces, and so direct him that he may discover that the bud is a collection of leaves on a short stem; that a bud is stem and leaves. Take a piece of elastic cord and some bits of paper cut in the form of leaves; make a hole in each of the pieces of paper, and then string them on the cord, quite close together; secure each piece to its place on the cord, with a bit of sealing-wax or some mucilage,—this may represent a bud. Now, take hold of the ends of the cord and stretch it, the leaves will be separated more widely from each other, and we shall have a *branch* or a *developed* bud.

Teach that the bud develops into a branch by elongation of the stem and enlargement of the leaves, and not by an increase in the number of leaves.

Some buds do not develop into ordinary branches, but into flowers. Show that a flower is a collection of developed leaves upon a short stem or axis. Call attention to the fact, before stated, that the peculiarly shaped and coloured parts of the flower (sepals, petals, stamens and pistils,) are only leaves. Then call attention to the place of the bud. Let the pupil discover that the bud is always between the leaf, or the leaf scar, and the stem.—*Chicago Schoolmaster.*

4. PRACTICAL AND APPLIED SCIENCE,—AN IMPORTANT QUESTION.

Among the most important of the questions which have agitated our Dominion during the past year, are the building of railroads and the development of our mineral resources. Hitherto we have quietly waited for our territories to be settled as best they could, thinking that afterwards we could build railroads. No man ever wishes to cultivate even the best of land if he cannot get the produce to market, so that if we ever expect to get our lands settled, we must do as our neighbours have done,—build railroads. Emigration will succeed, but not precede this enterprise, and it is well for us that the subject is at last being agitated here.

On the other hand, look at our mineral resources. The rocks of our Dominion are

"Un vaisseau freté pour l'avénir
Et richement chargé."

Pour l'avenir certainly, for hitherto we have left them well nigh undisturbed. During the past year, however, owing to the high price of ores abroad, we have begun to wake up to the fact of our having inexhaustible supplies. New mineral lands have been discovered, old ones have changed hands, and in a number of instances mining operations have been begun.

The question then arises, if we are to build railroads and develop our mineral resources, have we in Canada men competent to do the work? Some such we undoubtedly have, but the number is far too small, and, if much work is to be done, we must either train up men for it or import them from abroad. Undoubtedly the former is the better method. Men born and brought up in a country, provided they have means of education, are better fitted than strangers to cope with the difficulties peculiar to that country. Moreover, if we import men from other countries we cannot, as a rule, expect to get their first, but simply their second or third rate men.

What then is being done by way of training men here? A College of Technology has been established at Toronto on a broad scale and has been highly successful. Besides a "Department of Practical and Applied Science" has been instituted in connection with McGill College. For this latter we may thank Principal Dawson, and a few worthy citizens. Courses of study in McGill College extending over three years, are afforded in

- (1). Civil and Mechanical Engineering.
- (2). Assaying and Mining.
- (3). Practical Chemistry.

Most assuredly any one who has an interest in the advance of our Dominion, any one who wishes to see Canada take a high place among the nations, will wish well to the institutions just mentioned. We live in stirring times, times in which even great nations must needs put forth strenuous exertions in order not to fall behind, and surely if our infant Dominion is ever to become great, we must tenderly foster everything which tends to make it great. We must wish well to its educational institutions, but we must do more, we must give them substantial support.

5. OPENING SCHOOL.

The first day of school is an important one to the teacher; for his success or failure depends upon the arrangements made that day. In order to have clear ideas of what is to be accomplished, to lay plans systematically, and to enter upon his work in earnest, it is necessary to obtain, if possible, some knowledge of the condition of the school before attempting to classify it. There are so many things that require immediate attention, so many important decisions to be made, all of which demand prompt and energetic action, that it is absolutely impossible to decide them all in the most desirable manner, without some forethought; consequently, it is highly important to the success of the teacher that he become acquainted beforehand with the wants of the school. If he neglect to do this, he is apt to make serious mistakes, and, not having any plan to work by, is wavering and doubtful how to proceed. This the children perceive, and form their opinion of the teacher accordingly. A prompt, energetic teacher, one who can decide a question in the best manner instantly and finally, cannot fail to secure the respect and confidence of children.

The first thing to be accomplished in opening school is to make a good impression. This can be done by talking in a friendly manner to the children; telling them some little story, or explaining to them the object of attending school. Nothing can prove more injurious to a school than for the teacher to assume a commanding, arbitrary manner, showing the rod to intimidate the children, and using threats to enforce obedience. The children immediately brace themselves up against such treatment, and secretly resolve to transgress the rules every chance they have; thus a spirit of rebellion is aroused in their young minds, which no after acts of the teacher can counteract.

I do not think it necessary to have many rules. A few strictly enforced are better than many violated daily. It is possible for a teacher to enforce rules in the spirit of kindness, and it is necessary for him to be firm and resolute, yet pleasant and cheerful. It is a poor plan to let the children do as they please the first week, and then undertake to control them. If the bars of order are once let down, under pretence of seeing what the children will do, and who are the leaders, it is not so easy to put them up again. The better plan is to insist upon having order, perfect order, the very first day; doing this, it will be comparatively easy to require it the whole term.

It is necessary for the teacher to enlist the affections of the children as soon as possible. When the scholars feel that their teacher takes an interest in them, and desires to please them, then they will take an interest in the school, love their teacher, and make progress in their studies. Respect, however, must precede love. Children generally form their opinion of the teacher the first day; if his manner that day is such as to secure their respect, then he will be likely to gain their love, and be successful in his labours.—

E. H. M.

III. Biographical Sketches.

1. THE REV. WM. RYERSON.

Died at his residence, in the Township of Onondaga, 13th Sept., the Revd. William Ryerson, aged 75 years.

The father of the Revd. William Ryerson, was born in the state of New Jersey, and was of Dutch extraction. He had four brothers, each of whom lived to an average age of one hundred years, and he himself died fifteen years ago aged ninety-four. He was an officer in the Prince of Wales' Volunteers during the American war; and at the close of the American Revolution he removed to New Brunswick, where he married and where his eldest children were born, and subsequently came to Upper Canada, and settled in the County of Norfolk in 1795, having obtained land there from the Government. Col. Ryerson had a large family of sons and daughters, several of whom have acquired celebrity in this country. The eldest, the Rev. George Ryerson, resides in Toronto, and is a Minister of the Catholic Apostolic Church, on Bay Street, in connection with the body founded by the celebrated Edward Irving. He has still

the appearance of a hale old gentleman although he must be more than eighty years old. Samuel, the second son, was a farmer in the County of Norfolk, and died many years ago. Elizabeth, who was married to the late Judge Mitchell, of Vittoria, is also dead. Mary was the wife of Col. Bostwick, of Port Stanley. The Rev. William Ryerson, was born in New Brunswick. The Rev. John Ryerson, now superannuated, has resided for some years in retirement in Brantford, and his son, the late Egerton Fisk Ryerson, Barrister-at-law and County Attorney of the County of Perth, is likewise dead. The Rev. Dr. Ryerson, of Toronto, is well and widely known; and the Rev. Edw. Ryerson, the youngest of the brothers, died long since. The Ryerson family may be considered an extraordinary one—certainly the most notable connected with the Wesleyan Methodist body in this country. All the brothers were Ministers of the Wesleyan Methodist Church, George, the eldest, alone excepted; and before and for several years after the time of the rebellion, they had more control over the religious body to which they ministered than all others beside. The system of itineracy which is peculiar to Methodism in its various phases brought the Ryersons into contact with the leading people of this Province from one extremity to the other. Victoria College, which may be said to have been founded by them, had no existence in their early days, nor had the University of Toronto. Indeed the country was wholly without the adequate agencies to afford anything more than the most elementary instruction to the young. But the Ryerson brothers achieved distinction in spite of all obstacles. Gifted with great natural powers and mingling with all classes in the discharge of their professional duties, they reached a degree of culture surprising under the circumstances. As popular preachers they have rarely been equalled, and probably never excelled in Upper Canada, and as a public writer and controversialist, the Rev. Egerton Ryerson, the Chief Superintendent of Education for Ontario, is pre-eminent. The deceased, however, was esteemed the most eloquent of all the brothers—was indeed regarded by the powerful and respectable religious body to which he belonged as the orator of the family. Those who knew him in his best days describe him as a man of extraordinary intellectual vigour and of great originality of thought and illustration. His style was fervid and impassioned, although not always elegant and correct, and his appeals to the sympathies of his auditors are said to have been most powerful and impressive. Years ago he retired from the active duties of the Ministry to his beautiful farm on the banks of the Grand River—one of the most charming spots in the County of Brant. There he occasionally ministered in a mission church hard by to a congregation consisting of his neighbors and immediate friends, and there, if you chanced to call upon him, he would entertain you for hours with anecdotes and events connected with the past history of the country. He was familiar with all the leading men of forty or fifty years ago—knew the Hagermans, the Joneses, the Baldwins, the Sullivans,—indeed every man of eminence in the country. His conversation was most instructive and interesting, and like that of Coleridge, seemed to be exhaustless. He was converted in 1815, entered the active service of the ministry about 1820. He was induced, some years ago to contest the West Riding of Brant in the Conservative interest, and succeeded in defeating Mr. Biggar, the Reform candidate. His Parliamentary career was brief, he entered the political arena too late in life to achieve distinction.—*Brant Expositor*.

2. T. C. STREET, Esq., M. P.

Mr. Street was the son of the late Samuel Street, Esq., and, at the time of his death, was 58 years of age. He had four sisters, one of whom is the wife of the Rev. Dr. Fuller, Archdeacon of Niagara. He was educated for the bar, though his property rendered it unnecessary for him to practise his profession. He was an active politician, early taking his place in the Conservative ranks, a position which he kept till the day of his death, and no man could be more true to his principles, while at the same time in dealing with his constituents, all parties will bear testimony to his practice of his principles, that he represented the whole of his constituency, and not merely that part which gave him the heartiest support. Mr. Street's first essay in political life was in 1851, when he was elected for the old Parliament of Canada. In 1854 he was defeated by Dr. Frazer, but in 1861 was returned by a considerable majority, and has continued as our representative from that time until the present, having been returned at the first elections under Confederation in 1867, by acclamation, and at the late general election getting a renewal of confidence by a very large majority. Mr. Street was most deservedly a popular man, for, upright in all his dealings, fearless in his integrity, one who was never known to descend to a mean action to further his own purposes, or allow his influence to be used for an unworthy object, he commanded the respect of every

one, and friend and foe alike joined in giving him that highest of all praise, credit for strict honesty and honourable motives. On account of his wealth he was frequently applied to for assistance in pecuniary matters, and he was always known as indulgent with those who shewed an earnest desire to meet their just obligations, and many a thriving farmer in this County, will remember him in past days as one of their kindest of creditors, indeed more of a helper and counsellor than aught else.—*Welland Telegraph.*

3. MRS. PEARCE.

The late Mrs. Pearce, whose maiden name was Edmunds, was born in Brownville, Jefferson County, State of New York, May 29th, 1815, and came with her parents to Canada not very long afterwards. Most of her youthful years were spent in the family of her uncle, the late Mr. Keeler, of Colborne, under whose direction she came a settler to this township in 1835. She was married to Mr. Pearce, then in charge of her uncle's mill, May 29th, 1837, and took up her residence adjacent to the old mill, known to the early settlers as Keeler's Mills, and immediately commenced that long reign of whole-souled, warm-hearted, generous hospitality, which has made her name as a household word throughout all this section of the country. In the early days of our township history, when places of entertainment were few and far between, her house was often a resting-place for the weary and benighted traveller, and no one, however poor or unprepossessing, was sent cold or hungry away from her door. Especially to the Ministers of the Gospel, of all denominations, was her hospitality shown. Many of those pioneer preachers have gone home to their reward, but a few still linger on, and cherish the fondest remembrance of the welcome smile and the warm grasp of the hand that always met them as they crossed her threshold after their weary journey through the back woods. One of these, the venerable Father Sanderson, came all the way from Peterborough to attend her funeral, remarking to an acquaintance who expressed surprise that he should be able to come so far, "She was such a friend, that I could not stay away." She was peculiarly a home woman. Home was her theatre of action, her pedestal of beauty, her throne of power. She was not often seen abroad, and then almost always on some errand of love or mercy. She was always ready to enter, and as reluctant to leave, the abode of misery. It was frequently her office, and lovingly was it always performed, to stay the fainting head, wipe from the dim eye the tear of anguish, and from the cold forehead the dew of death. Though nearly always at home, yet she had a large circle of friends, and exerted a wide influence for good. It was the influence of an open, willing, visible example, enforced by that soft, persuasive, colloquial eloquence which is like the noiseless but balmy influence of spring. The last decade of her life was spent at Havelock, in the township of Belmont, making home happy for her family, and taking affectionate care of an aged and helpless mother, who still survives her.

Thus died, and was buried, another of that little band of brave men and women, who, amid great hardships and difficulties, succeeded in laying the foundation of our now prosperous settlements. It is only fitting that we should revere their memory.—*Peterborough Review.*

4. MR. MARCUS HOLMES.

Deceased, who was an American by birth, came to London in 1832, then a small village. He was a blacksmith by trade, and opened a shop on King Street. He soon added the manufacture of carriages and waggons to his business, and acquired considerable property, and many years ago retired from active life, to enjoy the competence accumulated. He was for some time a member of council of the then Town of London, and in 1854 succeeded Mr. Murray Anderson as Mayor.—*London Herald.*

5. "FANNY FERN."

"Fanny Fern," a writer of short essays of considerable merit, is much better known to the world under that name than by her own, Sara Payson Willis, she being a sister of N. P. Willis, the poet, and wife of James Parton, a biographer. Her death took place at her residence in New York, on Thursday evening, in the sixty-first year of her age. She was born in Portland, Me., in 1811. While still a small child her father removed with his family to Boston, and in that city she spent her early years. She was educated in Hartford, Conn., by Miss Catherine Beecher, who considered her a clever and capable, but not a brilliant girl. While still very young she married Mr. Eldridge, of Boston, and in 1850 she was left a widow in straitened circumstances, with three children. To support herself and little ones she began to write sketches for the Boston weeklies, under the name of "Fanny Fern." She became famous at a single bound, and her pseudonym is now as familiar as a house-

hold word. In 1856 she was married to Mr. James Parton, and since that time her writings have not been voluminous. It is said that Mr. Bonner has paid her the magnificent sum of \$150,000 for her contributions to the *Ledger* alone. Mrs. Parton had been afflicted for many years with inflammatory rheumatism. She has been able to ride about, however, and walk about in her garden—she was an ardent admirer of flowers—until this fall. She passed last summer at her villa in Newport. Her right arm was so affected as to be powerless, and she has not left her room since her return to the city. She was forced to sit in an easy chair, her arm being supported by a frame. To lie down caused intense pain and a difficulty in breathing. In this chair, where she has sat for two months, she died, surrounded by loving friends, and her eyes resting on the beautiful flowers which were her comfort in life.—*Gazette, Montreal.*

6. J. F. MAGUIRE, Esq., M. P.

The death is announced of Mr. John Francis Maguire, one of the most able of Irish members in the British Parliament. He had been for many years proprietor and editor of a newspaper published in Cork, and was a strenuous defender of Roman Catholic interests at home and abroad. A work published by him on the state of the Papacy and of the territories under its sway, to which he appended some valuable statistics bearing on the temporal and financial condition of the state of the Church, gained for him honours at the hands of the Pope. Mr. Maguire was the author of several other works, principally relating to Ireland and the Irish, and he took a leading part in promoting Irish industries, being a prime mover in the introduction of the linen industry into Cork. He was only 57 years of age. It can truly be said of the deceased gentleman, that his services in advocating the claims of Ireland in the British Parliament will be much missed, and that in Mr. Maguire Ireland loses one of her most able statesmen.

7. SKETCH OF CAPTAIN JOSEPH BRANT.

John Brant's Death.—In the year 1832, he was returned a member of the Provincial Parliament for the County of Haldimand; but as a large number of those by whose votes he was elected, held no other title to their lands than long leases, conveyed to them by Indians, his return was contested by the opposing candidate, Colonel Warren, who was declared chosen.

But it mattered not which should, for a short season, wear the Parliamentary honours. Death soon laid both low. The desolating cholera swept fearfully over the country of the Great Lakes, cutting down, in the prime of manhood, and just as a bright and brilliant career of usefulness promised future service and honour, this noble, this proud example of what civilization and letters can do for a son of the American forest!

On the death of her favourite son John, the venerable widow of Joseph Brant, pursuant to the Mohawk law of succession, conferred the title of *Tekarihogea* upon the infant son of her daughter—Mrs. Kerr. This son, Simcoe Kerr, still lives on the old homestead at Wellington Square, the recognized head Chief of the Six Nation Indians.

The widow of the late old Captain died at Brantford, on the Grand River, the 24th November, 1837, thirty years to a day from the death of her husband. Her age was 78. Dignified and stately in manners, tall and handsome in person, she well merited the title of "the Indian Princess."

Brant's Personal Appearance.—General P. B. Porter describes Brant as "distinguished alike for his address, his activity, and his courage, possessing in point of stature and symmetry of person, the advantage of most men, even among his own well-formed race—tall, erect, and majestic, with the air and mien of one born to command. Having, as it were, been a man of war from his boyhood, his name was a tower of strength among the warriors of the wilderness."

His Manners were affable and dignified, avoiding frivolity as one extreme, or stiffness on the other. Not noted for eloquence, his power lay in his strong, practical good sense, and his deep and ready insight into character.

As a Man of Rule.—The Rev. John Stewart represents "his influence to have been acquired by his uncommon talents and addresses as a councillor and politician, by which means he subdued all opposition and jealousy, and at length acquired such an ascendancy that, even in the hour of action and danger, he was enabled to rule and direct his warriors as absolutely as if he had been born their general."

As a Warrior.—He is represented as brave, cautious, and sagacious. His constitution was hardy, and his capability of endurance great, his energy untiring, and his firmness indomitable. In his business relations he was prompt, honourable, and a pattern for integrity.—*From New Dominion Monthly for November.*

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

1. ABSTRACT OF MONTHLY METEOROLOGICAL RESULTS, compiled from the Returns of the daily observations at ten High School Stations for SEPTEMBER, 1872.

OBSERVERS:—Pembroke—R. G. Scott, Esq., M.A.; Cornwall—James Smith, Esq., A.M.; Barrie—H. B. Spotton, Esq., M.A.; Peterborough—J. B. Dixon, Esq., M.A.; Belleville—A. Burdon, Esq.; Goderich—Hugh J. Strang, Esq., B.A.; Stratford—C. J. Macgregor, Esq., M.A.; Hamilton—J. M. Buchanan, Esq., M.A.; Simcoe—Dion C. Sullivan, Esq., LL.B.; Windsor—J. Johnston, Esq., B.A.

Table with columns for Station, Elevation, Barometer at Temperature of 32° Fahrenheit, Monthly Means, Range, Highest, Lowest, Monthly, and Tension of Vapour. Rows include Pembroke, Cornwall, Barrie, Peterboro', Belleville, Goderich, Stratford, Hamilton, Simcoe, Windsor.

Approximation. dOn Lake Simcoe. eNear Lake Ontario on Bay of Quinte. fOn St. Lawrence. gOn Lake Huron. hOn Lake Ontario. iOn the Ottawa River. jClose to Lake Erie. mThe Detroit River. kInland Towns.

Table with columns for Station, Humidity of Air, Winds, Number of Observations, Surface Current, Motion of Clouds, Amount of Cloudiness, Rain, Snow, Auroras, and When Observed. Rows include Pembroke, Cornwall, Barrie, Peterborough, Goderich, Stratford, Hamilton, Simcoe, Windsor.

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. First frost, 2nd-3rd. Wind-storms, 26th. Rain, 4th, 5th, 12th, 25th, 30th. Lunar halo on 15th. Lightning and thunder with rain, 7th, 12th, 18th, 19th, 22nd, 23rd. Frost, 13th, 15th, 21st, 26th. Wind-storm, 29th. Fog, 6th, 7th, 8th, 10th, 11th, 16th, 21st, 23rd. Rain, 4th-11th, 17th-19th, 22nd-26th, 28th. Very heavy rain on 16th. BELLEVILLE.—Lightning with thunder, 22nd. Thunder with rain, 12th. Lightning and thunder with rain, 17th. Rain, 5th, 8th, 9th, 11th, 13th, 17th, 18th, 22nd, 23rd, 26th, 29th.

N. W. to S. E., with much thunder and very vivid lightning. Very heavy rain storm also on night of 7th, and morning of 8th, with a great deal of thunder and lightning. Gale all day from S. W., 29th. Month remarkable for unusually large amount of rain, as stated in table above.

STRAITFORD.—Lightning and thunder with rain, 5th, 8th, 9th, 12th, 17th, 18th, 22nd, 23rd, 26th. Lightning, 6th, 7th. Thunder, 22nd. Hoar frost, 3rd, injuring tomato, cucumber and melon vines. Wind-storm, 18th, 25th, 26th, 28th, 29th. Fogs, 4th, 5th. Rain, 4th, 5th, 6th, 8th, 9th, 12th, 13th, 17th—19th, 22nd, 23rd, 25th, 26th, 29th. Excess of mean monthly temperature over average of eleven years, +1° 80.

HAMILTON.—Lightning, 6th, 7th, 23rd. Thunder with rain, 22nd. Lightning and thunder with rain, 8th. Wind-storm, 21st, 25th. Fogs, 6th, 9th. Rain, 4th, 5th, 6th, 8th, 9th, 10th, 12th, 18th, 19th, 22nd, 23rd, 25th, 26th, 29th. Some red leaves seen on 4th.

SIMCOE.—Lightning, 7th. Lightning with thunder, 23rd. Lightning and thunder with rain, 5th, 10th, 12th. Wind-storm, 26th. Rain, 5th, 7th, 9th, 12th, 13th, 18th, 19th, 20th, 23rd, 25th, 29th, 30th. Harvest on the whole abundant, although the crops were much injured by the drought.

WINDSOR.—Lightning with thunder, 5th, 7th. Lightning and thunder with rain, 8th, 9th, 12th, 22nd. Meteor through *Ursa Minor* to *Ursa Major*, 5th. Halo, 11th, 16th, 18th. Frost, 16th, 20th, 27th, 28th. Wind-storms, 8th, 18th, 19th, 22nd, 24th, 26th, 29th. Rain 4th, 5th, 8th, 9th, 11th, 12th, 17th, 18th, 19th, 22nd, 25th, 29th.

2. METEOROLOGY IN CANADA.

The increasing interest in the study and development of the science of meteorology and its importance and bearing on our Maritime and Agricultural prosperity has induced us to furnish to our readers a daily bulletin from eleven distant points of observation on this continent. Those from the United States are furnished by the signal office of the War Department at Washington, and those by the Dominion are collected at the Central Observatory at Toronto, and are despatched by telegraph to Dr. Smallwood, director of the Observatory here. We soon hope to see a signal storm drum erected also in connection with this physical science, and while the Dominion Government have with a liberal hand furnished the necessary funds for collecting from these distant points the necessary information, it becomes as a necessity incumbent on any locality which may desire to utilize the information, to permit the necessary funds for that purpose, which is but trifling compared with the results. We soon hope to see, as the system becomes extended, our own "weather probabilities" furnished us daily by observers in the Dominion as well as those in the United States.

V. Mathematical Department.*

1. To the Editor of the Journal of Education.

"Interest that is interesting."—A lends B. \$1,000 payable in ten annual instalments of \$160 each. What rate per cent. simple interest, does B. pay for his money?

Mr. Cameron, in the *Journal* for April 1872, says, "a majority of the commercial men of a Western Town, thought $10\frac{1}{11}$ to be the answer;" and adds that they are right according to text-book principles; but the true answer according to his calculation is $21\frac{3}{4}$. Now, in justice to the authors of our arithmetics, we must say that neither of the foregoing answers, is either correct or "in accordance with text-book principles." The following simple method of solution, will suffice to give our readers a correct idea of the disputed question.

$$160(1 + 2 + 3 + \dots + 10) - 600 = 8200$$

$\therefore 8,200 \div 1,600 = 5\frac{1}{8}$ years, the equated time for all the payments. The question is then: At what rate per cent. simple interest will \$1,000 amount to \$1,600 in $5\frac{1}{8}$ years?

As $1,000 \times 5\frac{1}{8} : 100 \times 1 :: 600 : 11\frac{3}{4}$, the correct rate at simple interest. The rate at compound interest, is found by the following method:

$$\text{Log. } A - \text{log. } P.$$

$$5\frac{1}{8} \text{ or } \frac{45}{8} \sqrt[45]{A - 1} = r \text{ or Log. } (1 + r) = \frac{t}{t}$$

$$\text{or Log. } (1 + r) = .039823; \therefore (1 + r) = 1.09607, \text{ and } r = .09607.$$

Therefore the rate at compound interest = 9.607. These are the correct answers, and "in accordance with text-book principles."

MATHEMATICAL EDITOR.

2. To the Editor of the Journal of Education.

SIR,—I noticed in the April number of the *Journal of Education* the solution of a question in interest by Mr. Cameron; and in the June number two criticisms on the same. Neither of the critics,

* Communications for this Department are to be addressed to Mr. Andrew Doyle, Hamilton.

however, has given a solution of the question, or pointed out the error of Mr. Cameron's method. The fallacy lies in the fact that Mr. Cameron's formula does not recognize the payment of any interest. The payments are all principal, and as such are deducted successively from the principal. Thus it happens that at the end of the time, the principal is largely overpaid, and the interest all standing unpaid. Suppose the annual payment to be \$500 instead of \$160. "Very hard terms for B.," any one would say, who had not been initiated into the mysteries of Mathematics. Not at all. On the above supposition, the (by the formula) negatives or overpaid principal will be in 10 years \$4000, and the negative interest will largely exceed the positive; or A will be B's debtor for the full amount that B has paid him above the original principal, viz: \$4000, and the excess of the negative over the positive interest.

The method sanctioned by custom and equity is, when payment is made, to deduct the interest then due from the payment, and apply the remainder on the principal. Represent \$1000 by a , and \$160 by $\frac{4}{25}a$; then the first year's interest will be ar .

$$\text{The second year's interest} = \frac{21}{23} ar + ar^2$$

$$\text{The third year's interest} = \frac{17ar + 46}{25} ar^2 + ar^3 \text{ etc.}$$

$$\text{The 10th year's interest} = \frac{11}{25} ar + \frac{81}{25} ar^2 + \frac{564}{25} ar^3$$

$$+ \frac{1596}{25} ar^4 + \frac{2746}{25} ar^5 + \frac{3014}{25} ar^6 + \frac{2056}{25} ar^7 + \frac{864}{25} ar^8 + \frac{221}{25} ar^9 + ar^{10}.$$

$$\text{The sum of this progression or the whole interest} = \frac{70}{25} ar + \frac{645}{25} ar^2$$

$$+ \frac{2160}{25} ar^3 + \frac{4342}{25} ar^4 + \frac{5760}{25} ar^5 + \frac{5070}{25} ar^6 + \frac{2920}{25} ar^7 + \frac{1085}{25} ar^8 + \frac{246}{25} ar^9$$

+ $ar^{10} = 600$. Substituting the value of a , transposing, &c., we get $25r^{10} + 264r^9 + 1085r^8 + 2920r^7 + 5070r^6 + 5760r^5 + 4342r^4 + 2160r^3 + 645r^2 + 70r - 15 = 0$. The value of the first four terms may be rejected, and the remaining equation solved gives $r = .0960699$.

I remain,
Your obedient Servant,
J. RYERSON.

Waterford, Sept. 18th, 1872.

ANSWERS TO CORRESPONDENTS.—Mr. John Ireland says he has not seen a solution of his "Indian Reserve" question. We refer him to the June number in which he will find a correct solution by Mr. Scudamore. If the question take the form, Find a line which, with three given lines, will contain the greatest area; the line sought must be the diameter of the semi-circle in which the three given lines are inscribed.

Mr. Jos. P. Taylor—The sum of the squares of any two quantities equals twice their product plus the square of their difference.

R. Cooley—Your communication shall receive due attention when we receive other solutions to the problems now published.

We respectfully inform our mathematical correspondents that, in future, we will give a list of their names with the numbers of the problems which they solve correctly. We will also publish the best solution of each problem proposed. In proposing new questions, avoid as much as possible, those which require the use of diagrams.

VI. Miscellaneous.

1. INDIAN SUMMER IN CANADA.

BY E. H. NASH.

A stillness now pervades the air,
A mournful calm is everywhere;
The winds that stripped the forests gay,
The autumn winds have died away.
Awhile they raved o'er mountain and dale
In fitful gusts, with moaning and wail,
But now they are hushed, they are stilled at length,
As if awed by the works of their own great strength.
Mildly the sun looks down to earth
His summer brightness fled;
As though his eye were dimmed by grief
For nature's beauties dead.

From the leafless forests the songsters fly
As if warned by a dread desolation nigh ;
And the murmur of waters, unstartled by a breath,
Is sad as the music that tells us of death.

A sound to break this stilly calm
Would fall upon my ear
Discordant as the tones of mirth
When sorrowing souls are near ;
Would seem as the strains of a joyous song
To the heart of a watcher, watching long ;
As the noisy speech or the heavy tread
In the darkened chamber where sleeps the dead.
—*New Dominion Monthly for November.*

2. POLITENESS IN SCHOOL.

It will always bring a rich reward of respect to be polite to your pupils. Children relish and appreciate an "if you please" and a "thank you," and it adds to their self-respect, without which there is no true worth. Give your example to your precepts. Children can detect sham as well as grown people, and will often notice inconsistencies in walk and conversation that older people might pass unobserved. The successful teacher will have few rules, and respect them himself. The best is one that children can easily understand, viz.: "Do right." Explain what is right on different points, and impress on the children's minds that God always sees them, though the teacher may not. Talk to them often about their accountability for the gift of intellect, and you will be surprised at the display of conscientiousness! Encourage their little confessions at each evening's report, and you will see more bright faces than if truth were sacrificed, and the children sent home with ill-gotten rewards. Good government is the mainspring to success.—*Iowa School Journal.*

3. TACT

Love swings on little hinges. It keeps an active little servant to do a good deal of its fine work. The name of the little servant is Tact. Tact is nimble-footed and quick-fingered; tact sees without looking; tact has always a good deal of small change on hand; tact carries no heavy weapons, but can do wonders with a sling and stone; tact never runs his head against a stone wall; tact carries a bunch of curious-fashioned keys, which turn all sorts of locks.

4. A WORD TO BOYS.

Boys, did you ever think this world, with all its wealth and woe, with all its mines and mountains, oceans, seas and rivers, with all its steamboats, railroads and telegraphs with all its millions of groping men, and all the science and progress of ages will soon be given over to the boys of the present age—boys like you? Believe it and look abroad upon your inheritance, and get ready to enter upon its possession. The presidents, emperors, kings, governors, statesmen, philosophers, ministers, teachers, men of the future—all are boys now.

5. FAITHFULNESS TO EMPLOYERS.

There is no greater mistake a young man can commit than that of being indifferent to the interests of his employer. It is true there are circumstances under which it seems almost impossible to feel an interest in an employer's business; but for all that it is worth a trial. Be faithful in small things; be attentive to your duties; shirk no employment that your employer is fairly entitled to every minute of the time which you have agreed to give him for a stipulated remuneration. The wages may be small, too small; but if you have contracted to work for a dollar a week when your work is worth ten, stick to your bargain like a man, until your term of service has expired. It may seem very hard, but it will instil the great principle of being true to your word.

And, besides, you will gain a reputation for faithfulness and integrity and diligence which is worth more to a young person than thousands of silver and gold.

The good friend, who taught a boy the tanner's trade, when he was about to finish his apprenticeship promised to give him a present worth more than a thousand dollars. He carried the young man home and said: 'I will give thy present to thy father.' And then he turned to the father and said: 'He is the best boy that ever I had.'

That was the Friend's present, and the father confessed that it was 'worth more than a thousand dollars' for a boy to have and to deserve so good a name as that.

A good name is a fortune in itself; a good trade is another. If you earn but little try to learn a good deal. Your learning may be worth more to you than your earnings. Out of the hundred persons committed to States' prisons, only three have learned good honest trades. Ninety-seven persons without trades go to State prisons, when three persons with trades go there.

So wherever you are try to master your business; determine to know something; attend to what you are taught; and do thoroughly what you do at all. Finish what you begin. Put things back where you find them. Avoid dirt, disorder, and dissipation; resist the devil and submit to God, and blessed and saved, you shall serve him both now and forever.—*The Christian.*

6. YOUR EVENINGS, YOUNG MEN.

The historian Hilliard has said:—"To a young man away from home, friendless and forlorn, in a great city, the hours of peril are those between sunset and bed-time;" and we have no doubt many a young man will respond to this sentiment. It is then that the theatre throws open its doors, the drinking-saloon tempts by its glitter of lights and glasses; then the strange woman stalks abroad; then it is that your companions, tired of the day's labours, and seeking recreation, step beyond the line of rectitude, and cordially invite you with them. What must you do? Avoid temptation; but that is easier said than done. How do you do when you wish to avoid thoughts that trouble and unsettle you. You think of something else, and while you are reflecting upon other things, you are not thinking of your troubles.

Your duty then is plainly to do something—something that will put you out of the way of these temptations.

If you are happy enough to have a home, be found there as much as possible, and feel that you are bound to do something for the comfort and social life of that home. If you are in the city, boarding, then see that every evening is well occupied. Pass part of this leisure in reading or study, at your room, when it is possible. What fields of knowledge you may survey, and what acquaintance with the past you may make, by one or two evenings spent in this way every week! When you go out, as you certainly need to do, go to some lecture; visit some refined home, where woman's influence will soften you; connect yourself with some class or society where improvement is the motive. If you wish amusement, go where refinement will surround you, and where conscience will not reprove you; unite yourself with a Christian Association, and enter into its work, and be at the prayer-meetings. But do not feel that you can do without God's grace in your heart. All that we have mentioned is only secondary. Here is your armour.—*Association Monthly.*

7. READ AN HOUR A DAY.

An English paper tells of a lad who at the age of fourteen was apprenticed to a soap-boiler. One of his resolutions was to read an hour a day, or at least at that rate, and he had an old silver watch, left him by his uncle which he timed his reading by. He stayed seven years with his master, and said that when he was twenty-one he knew as much as the young sire did. Now let us see how much time he had to read in seven years, at the rate of an hour a day. It would be 2,555 hours, which, at the rate of eight reading hours each day, would be forty-five weeks, equal to twelve months—nearly a year's reading. That time spent in treasuring up useful knowledge, would pile a very store. Surely it is worth trying for. Try what you can do. Begin now. In after years you will look back upon the task as the most pleasant and profitable you ever performed.

8. ARCHBISHOP SUMNER ON OBSTACLES AND IMPROVEMENT.

It has been well said by the late Archbishop of Canterbury (Dr. Sumner,) in his "Records of Creation,"—"Of all obstacles to improvement, ignorance is the most formidable, because the only true secret of assisting the poor is to make them agents in bettering their own condition, and to supply them, not with a temporary stimulus, but with a permanent energy. As fast as the standard of intelligence is raised, the poor become more and more able to co-operate in any plan proposed for their advantage, and more likely to listen to any reasonable suggestion, and more able to understand, and therefore willing to pursue it. Hence it follows, that when gross ignorance is once removed and right principles are introduced, a great advantage has already been gained against squalid poverty. Many avenues to an improved condition are opened to one whose faculties are enlarged and exercised; he sees

his own interest more clearly, he pursues it more steadily, and he does not study immediate gratification at the expense of bitter and late repentance, or mortgage the labour of his future life without an adequate return. Indigence, therefore, will rarely be found in company with a good education." (Fourth edition, Vol. 2, page 338.)

VII. Educational Intelligence.

—MCGILL UNIVERSITY.—The total number of students entered in the University up to the present date is two hundred and ninety. Of these 35 are students in Law, 158 students in Medicine, and 97 students in Arts. These numbers are considerably above those at the corresponding period of last session. Of the junior students previously announced as having taken exhibitions of the value of \$100 to \$125 in the Faculty of Arts, at the commencement of the present session, two were pupils of the Huntington Academy, one of the Clarenceville Academy, and one of the Shefford Academy. Two others who took similar distinctions had been under private tutors. Those who took the highest places in the matriculation examination were from the Montreal High School, the Iroquois Grammar School, Ont., and the Sunbury Grammar School, N. B. Of these two received free tuition Scholarships from the Board of Governors. The examinations for next year will be announced in the calendar for the present session, though it is possible that additional exhibitions and scholarships may be offered. It would be well that those who intend to compete in September next should prepare during the coming winter, and that teachers should keep in view the interests of their pupils in this matter.—*Montreal Gazette.*

—QUEEN'S COLLEGE.—We learn with much pleasure that Mr. James Russel, of Hamilton, has instituted a bursary or scholarship of Biblical knowledge in the University of Queen's College of the value of fifty dollars per annum, and has provided the means of payment of the same for the next three years. Mr. Russel has already proved himself a liberal benefactor to the educational institutions of his native county, Morayshire, Scotland, and now desires to do something in the same way for the land of his adoption. We trust Mr. Russel's liberality will stimulate others to go and do likewise. Mr. Shaw is the winner of the Russel Scholarship for the present session.—*Montreal Gazette.*

—SOUTH HASTINGS TEACHERS' ASSOCIATION.—The regular monthly meeting of the above Association was held on Saturday, 21st ult., commencing at half-past 10 o'clock, a.m. Mr. Inspector Johnston in the chair. After the usual routine of business had been disposed of, Mr. Gallivan occupied the chair while Mr. Inspector Johnston proceeded to analyze the first page of the first lesson in the 4th Book of National Series of Readers, rendering the most difficult parts perfectly plain and simple. These exercises in Analysis are certainly very valuable to the teachers, giving as they do a great deal of information on what is generally considered to be one of the most difficult subjects to teach well. Mr. Sanford Johnston then gave his method of teaching Mensuration of squares and parallelograms, giving the rules for finding the area, base, perpendicular, and diagonals, of each; also for finding the area, base, perpendicular, and hypotenuse, of a Right Angle Triangle, giving the reasons of the various processes employed, and demonstrating and illustrating each step. As time did not permit him to finish his subject, he kindly consented to take up the subject at the next meeting of the Association. It was evident to all present that Mr. Johnston is thoroughly master of his subject. Mr. Sprague then gave the method of teaching book-keeping to a class of beginners. He said he would at first teach them the difference between debit and credit, and make them thoroughly understand those terms before proceeding further, and he would exercise them in pointing them out from exercises which he would give them. He would make them thoroughly acquainted with every step taken, and illustrate and explain every term and definition given, and never leave any point until it is thoroughly understood by the whole class. He would then proceed to teach them to journalize,

and afterwards give them short sets upon the blackboard to be journalized on their slates. He said the chief difficulty was in teaching them to journalize correctly, and when this was once learned the greatest difficulty was overcome; he would then proceed to teach them to post and balance accounts on their slates; and he would keep them at the slate exercises for two or three months before putting them at the books. At the request of the President, Mr. Sprague gave a short set on the blackboard, suitable for a slate exercise. Mr. Gallivan then proceeded to his method of teaching how to average accounts, after which Miss Templeton proceeded to give her excellent method of teaching that very useful but much neglected subject, Composition; fully sustaining her reputation as one of our most successful and thorough teachers. An extract was read from a letter in the *Toronto Globe* of the 17th Sept., in which Prof. Bell charged Mr. Inspector Johnston with having made a false statement, when he said that not one Common School Teacher voted for the motion condemning Dr. Ryerson's Book on Agricultural Chemistry. The following motion was then submitted to the Convention:—*Resolved*, That we, the teachers of South Hastings, in Convention assembled, do hereby unanimously assent to the statement made by Mr. Inspector Johnston, with reference to the action taken by us on Dr. Ryerson's work on Agricultural Chemistry, viz., that not one Common School Teacher voted for the motion condemning Dr. Ryerson's book, and we regret to see a letter in the *Globe* of the 17th inst., charging Mr. John Johnston with a lack of adhering to truth in the matter. The next meeting will be held on Saturday, the 19th of October. Subjects—Analysis, by J. Johnston; Mensuration, by S. Johnston; Fractions, by J. Gallivan; Notation, by S. Pashley.—*Intelligencer.*

—HURON COLLEGE.—This Institute, established by the Right Rev. Dr. Cronyn, late Bishop of Huron, was inaugurated by Bishop McIllvaine, on Dec. 2, 1863. On Bishop Cronyn's consecration to the Episcopal office, in 1857, he found that out of 138 townships in the 13 counties constituting the Diocese of Huron, not more than 30 were supplied with the ministrations of the Gospel, and to supply faithful ministers of the Church was the object sought to be attained by the establishment of this College. The Rev. Isaac Brock, M.A., of Queen's College, Oxford, the Principal and Divinity Professor, has been succeeded by the Very Rev. Dean Boomer, late of Galt, and the Rev. W. Henry Halpin, M.A., Trinity College, Dublin, is the Classical and Mathematical Professor. We visited the lecture rooms, the library and dormitories, and found 13 students in the College, 7 of whom were recently ordained in London by the Bishop of the Diocese. St. John's Chapel is situated near to the College, and is a very neat, churchly, and well constructed building. It will accommodate about 250 worshippers. There is a Sunday School connected with it, the attendance being from 40 to 50, under the superintendence of Mr. Joseph and Mr. Craig. On the left of the pulpit is a tablet, erected to the memory of General Thomas Evans, C. B., Colonel of H. M. 81st Regiment.—*Special Correspondent of the Church Herald.*

—VICTORIA MEDICAL COLLEGE just finished, at the corner of Don and Pine streets, was formally opened by the Rev. Wm. M. Punshon, LL.D., in presence of a large number of persons.

The building is an attractive one, situated on the south-west corner of Don and Pine streets. It is fifty-five feet in depth, and two stories in height, with a good basement the whole side of the building. The main entrance is on Don street, and on each side of the spacious hall is the laboratory and ordinary lecture room, with folding doors between, and in the rear of the latter room is the private room for the professors.

On the west side of the hall is the students' room, and in rear of this is situated the caretaker's room. You reach the second story by a spacious stairway, and on the west side of this story is found a finely lighted and spacious dissecting room, fitted up with all the modern improvements, including a dumb waiter from the cellar, and other conveniences. The side windows are large, and there is a fine sky-light, which makes

the room very bright and airy. On the east side of the upper portion of the building is situated the amphitheatre, in which will be placed a beautiful stained glass window. This room is fitted up very comfortably, and will accommodate at least three hundred students. This spacious room is also well lighted by side windows and a sky-light; and the apartment is reached from the Professors' room by a private stairway. There is a stained glass window at the head of the landing, between the dissecting room and the amphitheatre, which is attractive. The building is constructed of red and white brick with stone foundations, and will cost about \$7,000. The college was originated and erected under the immediate supervision of Dr. Canniff, the President of the College, who was indefatigable in his efforts to secure a complete structure, and being ably seconded by the contractors, he has certainly succeeded, the college being one which the faculty may well feel proud to possess.—*Leader*.

—TORONTO UNIVERSITY.—The election of Mr. W. G. Falconbridge, M.A., to the Registrarship of the University, will be hailed with delight by those who claim that as their *alma mater*. The Professors and members of the Senate have done themselves credit in the appointment.

—PRESENTATION.—The pupils of John street school, Toronto, presented their head master, Mr. Samuel McAllister, with a very valuable black marble time-piece, and a pair of beautiful lustres, together with an address, in which they expressed their esteem and affection for him, and their high appreciation of his efforts to advance the welfare of the school.

—EDUCATION IN IRELAND, 1871.—An English Parliamentary return lately issued give some figures which will help to dissipate the ignorance which generally exists concerning the educational system in Ireland—the notion that the system there is a mixed one, and not a denominational one. During 1871 there were 1,021,700 children on the rolls of the National Schools, 821,768 Roman Catholics and 188,699 Protestants. The Catholic pupils thus form 90 per cent of the whole numbers. More than half the Roman Catholic pupils—417,013—are educated in schools which are practically unmixed. The schools are taught exclusively by Roman Catholic teachers, and attended by none but Roman Catholic children. In the same way we find that there are 252 schools (mostly, of course, in Ulster) which are absolutely unmixed in a Protestant sense. Of the 472,795 pupils on the books of the schools with a mixed attendance, 364,347 are Roman Catholics, in 2,659 schools taught exclusively by Roman Catholic teachers, and having only the small admixture 26,863 Protestant pupils, or one in fifteen; 125,785 Protestant pupils (mostly in Ulster) are in 1,166 schools taught exclusively by Protestant teachers, and having 28,285 Roman Catholic pupils or one in five. The remaining 27,516 children are more equally mixed in 123 schools, chiefly in Ulster. The Roman Catholics ask for a denomination system, and we find that the mixed system has in practice so much of a denominational character that of the whole 821,769 Catholic pupils all but 40,494 are being educated in schools by masters of their own faith; so that the change asked for will be only a nominal one.

—Quetelet's statistics of crime in France and England show that, in the former country, out of one hundred criminals, sixty-one could not read or write, twenty-seven could read imperfectly, and only twelve could read and write well. In England, thirty-six could not read at all, sixty-one could read and write imperfectly, and only three could read and write well.

—On the 8th of February, 1875, the University of Leyden will celebrate its three hundredth year. On that day, an enterprising bookseller, of the Hague, will publish the roll of members of the University, from its foundation to the present time. The book will form a handsome double-columned quarto, and will be accompanied by an alphabetical index of names.

VIII. Departmental Notices.

VALUE AND DURATION OF CERTIFICATES.

The certificates to be awarded under these regulations are:

First Class Certificates, Grade A.

Do. do., Grade B.

Second Class Certificates, Grade A.

Do. do., Grade B.

Third Class Certificates.

1. First and Second Class Certificates are valid during good behaviour and throughout the Province of Ontario; and a First Class Certificate of the highest grade (A), renders the holder eligible for the office of County Inspector.

2. Third Class Certificates are valid only in the county where given, and for three years, and not renewable, except on the recommendation of the County Inspector; but a teacher, holding a Third Class Certificate, may be eligible in less than three years, for examination for a Second Class Certificate, on the special recommendation of his County Inspector.

INTER-COMMUNICATIONS IN THE "JOURNAL."

As already intimated, a department is always reserved in the *Journal of Education* for letters and inter-communications between Inspectors, 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.

POWER OF THE "RETIRING TRUSTEE."

In reply to many inquiries on this subject, we answer: That by the New School Act the lost power of the "retiring trustee" has been restored. Up to 1850, he had the same power as any other trustee, but in that year it was enacted that he could not lawfully sign an agreement with a teacher, the duration of which would extend beyond his period of service. That clause has now been repealed and the "retiring trustee" has now precisely the same powers in all respects as either of his colleagues.

NEW SCHOOL REGISTERS.

In reply to numerous applications for Public School Registers, &c., we desire to say that the new edition (including the modifications in the courses of study required by the new School Act) has been sent out to the County Clerks for distribution through the Inspectors. No copies will be sent out direct to individual schools from the Education Department. Trustees will, therefore, apply to the Inspector for them.

ASSISTANTS IN HIGH SCHOOLS A NECESSITY.

Trustees of High Schools will bear in mind that they are required to employ an Assistant Master, in order to give effect to the new programme. The qualifications of these assistants are, that they shall either hold a Public School Teacher's certificate, or at least be certified as an undergraduate in the faculty of Arts, of good standing in some university in Her Majesty's dominions.

The Trustees of each High School, now being established, are required, and consent to employ *two* masters in their School, whatever may be the number of pupils in attendance. In justice to these new Schools, and in order to carry out the prescribed programme of studies in High Schools, this rule will, at the close of the current six months, be applied to all the High

Schools in Ontario. When the application of the new principle of "payment by results" (authorized by the Act of last year), will come into force, it will necessitate a more thorough and satisfactory system of instruction than at present exists in many of the High Schools.

ASSISTANT TEACHERS' CERTIFICATES.

The question is sometimes asked if it be necessary that an assistant teacher should hold a legal certificate. We reply: It is absolutely necessary that he should hold one. The law expressly declares that every person receiving any part of the School Fund as teacher shall hold a legal certificate of qualification. The Superior Courts have also decided that trustees cannot legally levy a rate for the payment of a teacher who does not possess the necessary qualifications as such under the School laws.

NEW SCHOOL MANUAL.

In answer to various inquiries on the subject of a new School Manual we would say, that it is not thought desirable to publish a School Manual at present. Such a Manual should include in it the official regulations, but as they will not be revised until about the close of the present year (1872), or later, they cannot be embodied in the manual until then.

We would state, however, that the whole of the School Law and the general official regulations will be found in this Journal for May and June, 1871. Copies of these journals, when published, were sent by mail and addressed to each school corporation in Ontario. The supply is, however, now exhausted.

TRUSTEES' INCOMPLETE RETURNS.

Some Inspectors complain of the very great incompleteness of many of the school reports received from Trustees of rural sections, and ask what they should do with them? By reference to the reports themselves, Trustees will see that the Inspectors are directed to return to them all incomplete or incorrect reports. The law declares that a School Section shall forfeit its share of the School Fund, should its Trustees fail to furnish the Inspector with a full and satisfactory report yearly and half yearly. It will, therefore, save the Inspectors a good deal of time and trouble, and the Department some delay, if the Inspectors will promptly return to the Trustees all imperfect reports, so as to have each column correctly filled up. Should an Inspector's Reports to this Department be incomplete, they will have to be returned to him so that the desired information may be obtained.

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 Ontario. 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.

"OLD COUNTY BOARD" CERTIFICATES.

The question is often asked: "Can the present Board of Examiners recall the old County Board Certificates?" We reply: They cannot recall any of the old County Board Certificates which were given for life, or for a term of years. They can, however, at the proper time, recall those which were given for an indefinite time, or during the pleasure of the Board; that is those which on the face of them clearly show that they were given subject to such recall. The Department has in all cases requested the Board of Examiners not to recall these latter certificates *this year*, nor until the supply of teachers is more equal to the demands of the schools than at present.

THE ACT OF 1871 AND SEPARATE SCHOOLS.

In reply to a question frequently asked, we desire to say that the new School Act and Regulations do not in any way affect the Separate Schools. It was not intended to affect them when the Act was passed; and it would be unjust to the supporters of these Schools thus to legislate for them indirectly, and without their knowledge. The Inspectors will, therefore, be particular not to apply the Act, or any of the new Regulations to Separate Schools.

AUTHORIZED TEXT BOOKS.

The list of the authorized Text Books for High and Public Schools, so far as completed by the Council of Public Instruction, is published in the *Journal of Education* for October, and on a separate sheet. Inspectors, Trustees and Teachers will please see that these books are used in the schools.

PRINTED SHEETS FOR SCHOOLS.

1. The New Programme.....	} Large Sheets.	} The ten sheets sent free of postage for 50 cents.
2. The New Limit Table.....		
3. A Blank Time Table.....		
4. Duties of Pupils.....		
5. The Ten Commandments.....	} Small Sheets.	
6. Library Regulations.....		
7. List of authorized Text Books.....		
8. Merit Cards and their uses.....		
9. Hints on constructing Time Tables.....		
10. Departmental Notices.....		

TABLET READING SHEET LESSONS.

Being the First Book of Lessons in Tablet form, in thirty-three sheets, 75 cents (By post, postage paid)..... Price \$1 00
 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
 The 100 per cent is allowed on those and the Geography sheets.

SHEET LESSONS ON GENERAL GEOGRAPHY,

In 13 sheets, 50 cents; or by post, postage paid, 57 cents; mounted on cardboard and varnished, per set, \$2 25.

IN THE PRESS.

THE ONTARIO SCHOOL LAW.

Relating to County Councils—Township Councils—City, Town and Village Councils—Township Boards—Union School Sections—Arbitrations in regard to School Sites—County, City and Town Public School Inspections, Boards of Examiners, &c., &c., being Part II. of School Law Lectures. By J. GEORGE HODGINS, LL. D., Barrister-at-Law. Price 75 cts.; by Mail, 80 cts.

COPP, CLARK & Co., King Street East.

Toronto, 1872.