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THE
EDUCATIONAL RECORD
OF THE
PROVINCE OF QUEBEC.

No. 4.

APRIL, 1900.

VOL. XX.

Articles : Original and Selected.

THE RIGHTS OF CHILDREN.

By W. D. LIGHTHALL, M.A., B.C.L.

(Concluded.)

Now, for the application of the foregoing observations.
1. How do the results attained to-day among us compare with what should be? 2. What can we do practically in the matter of the child better than is being done?

The results we have attained differ somewhat in the different provinces. In all, the parents' condition and the parents' will govern almost exclusively the destiny of the child. The children of habitual paupers, habitual drunkards, habitual criminals, are with but few exceptions left to their fate. The rare exceptions in Quebec, where the magistrates interfere, are where complaint is laid that life or limb is endangered, support refused or vice positively taught.

Compare the results with the conditions which are the true right of the child. This right, as we have observed, comprises *all* that would make for him a fair and equal chance in life with every other child in the community. Obviously to leave him exposed to control of and association with parents who are habitual criminals is a cruel outrage. I assert the principle that *wherever two parents are discovered to be habitual criminals, their children ought inva-*

riably to be taken from them and brought up by the State. This presupposes proper arrangements by the State for institutions in which good nurture will be provided. At present we have but the reformatories—which are jails—and the refuges kept by private charity, some of which are very good, some very inefficient,—but all together totally unequal to the required capacity. Charity has failed, as a remedy, from lack of means. Day after day the magistrates in despair cry “what can we do? There is no place to send such cases;” and this with regard to only the few which are brought to their attention.

The children of *habitual paupers and vagrants* have the same account against the State as those of habitual criminals. It is impossible for them under such circumstances to obtain the equal chance which belongs to them. In Holland, Government Colonies are provided, where the reclamation of land from the sea is compulsorily imposed upon confirmed paupers, while their children are taken from them and provided for in institutions of the kind here proposed. The system is stated to work excellently, and to make good citizens both of the paupers and their children. In the end they are endowed with portions of the land reclaimed. The operation of such colonies would be both easy and beneficial in Canada, seeing the extent of our magnificent unimproved lands.

The case of *deserving poor parents* who cannot help their children adequately is quite different. Any proposal or even offer to separate the children would be in its turn an inconceivable outrage. Instead, the State must assist and supplement rather than attempt to supplant their efforts. A general supervising bureau of the rights of children—something like the English school attendance inspectors—ought to be provided—but its object should be to assist such parents. If food is lacking, the State should provide the necessary food. This question is now practically before the London School Board, by whom it is found that some 12,000 children attending their schools come without breakfasts owing to sheer poverty on the part of honest parents, and it is proposed to supply such breakfasts at certain schools at the public expense in order that these children may be able to study efficiently. One phase of the question is how to provide the meals without attaching to the unfortunates the stigma of pauperism.

Free and *compulsory education* we certainly should have. Exactly what ought to be its details is a matter for educational authorities to discuss, but its necessity is shown by the close association everywhere of crime, disease and misfortune with illiteracy. Leaving aside crime and taking misfortune only, we see in the epidemic of small-pox in 1886 at Montreal, that about 5,000 deaths above the ordinary rate, occurred through illiteracy—the annual rate being more than doubled among our East End population. For such reasons I consider for example that our system of separate taxation of Protestants and Catholics is wrong; and that it is necessary that the school taxation be according to population. However, that is but one detail.

There are a number of other advantages which the State owes it to children to procure or see procured—good housing, public play-grounds, fine libraries, art museums, scholarships, and the opening of other public avenues to improvement. The opportunity of political equality, which has been so fully provided, is not enough; the opportunity of equipment for *social equality* if the child can win it, is also his due. That the children should suffer, generation after generation, for the sins, the ignorance, the vulgarity of their parents, where they possess an inborn capability for something more, is unjust. A fair field and no favour applies to the child in the battle of life, as well as to the contestant in any other battle. American laws generally go very far in considering the right of the child, while endeavouring to harmonize it with those of the parent. "The anxious purpose of the courts," says an authority, "is the welfare and best interest of the children. Hence, where the father or mother, or both, voluntarily release the custody of a child to a third person, such contracts will be held binding if the child is well cared for and unwilling to return to its parentso the father may, by immoral or vicious habits, or by ill-usage of the child, forfeit his parental right. In such cases the courts will exercise a discretion in awarding the custody of a child as its welfare may demand.....In Nebraska and Indiana.....the court is bound to look only to the welfare of the child, awarding its custody without reference to the rights or wishes of the parents." Needless to say that these principles go far

* Wormer, The American Law of Guardianship.

beyond anything in the timorous Canadian legislation. But it is needless also to remark that after all they are only laws, and to point to the unperformed duty of the State towards the children in American cities, notwithstanding the enactment of good legislation. Yet private and municipal enterprises deserve deep study and attention. Here for example is a passage from the last report of the American Park Association: "Both Chicago and New York have purchased a number of small squares in the more densely populated districts of the city for "breathing spaces," which are now conceded to be as necessary to the health and comfort of the inhabitants of crowded districts as any other sanitary measures. In many cities playgrounds have been established, where children of the streets have been gathered and placed under the care of competent teachers who soon win their love and respect. Mothers who have seen better days, and whom circumstances have forced to live in neighbourhoods where their children were surrounded by the worst elements in social life, call down blessings upon the heads of the promoters of this great work. Faces grown prematurely old, soon take on youthful expressions, and the swings and dolls, the games and the sand-heaps are thoroughly enjoyed. The children's playground can be made the kindergarten of outdoor art." In Minneapolis a Ladies' Association runs two such playgrounds.

Recent statutes in England approach in spirit the American law, though the rights of the father to custody are more jealously guarded. The courts used to be bound, in the absence of misconduct on the part of the parent, to invariably order his children to be given up to him, but they may now enquire whether it is for the welfare of the child, and refuse if convinced the interests of the child are in peril; but it is held that mere immorality or a habit of intemperance on the part of the father do not justify the interference of the court. And still we find no State supervision, no State institutions. How this works may be illustrated by one leading case. In a case of conduct showing the father to be a person to whose guardianship it would be very objectionable to entrust children, it was held to be sufficient ground for depriving him of their custody and for providing for their maintenance and education *where such a provision can be effectually secured.* But

where the only security proposed was a deed of covenant of the infants' grandmother to provide for their maintenance and education, it was held that *such covenant was not sufficient to enable the court to interfere*. So that in default of any place for them to go, they were thrown back into the custody of the parent whose influence was proven to be bad. The well known fact must be admitted, however, that the American and English school laws and arrangements for *compulsory education* place their institutions far ahead of some of ours on one point; although Ontario and Manitoba at least redeem the Dominion as far as their territories are concerned. The best piece of legislation in Canada is the recent *Children's Protection Act of Ontario*, intended for the protection and reformation of neglected children. The spirit and provisions of this Act are very good. It provides for a Superintendent of Neglected and Dependent Children, and its strength and weakness are apparent in the enumeration of his duties, which are substantially to encourage and direct the formation of children's aid societies for the protection of children from cruelty, and for the due care of neglected and dependent children in temporary homes or shelters, and for the placing of such children in properly selected foster homes, to himself exercise similar powers to theirs, and to inspect industrial schools and temporary homes. Temporary homes or shelters for young children, entirely distinct from penal or pauper institutions, are to be provided in every town of over 10,000 inhabitants, for temporary protection until a suitable foster home can be found; existing children's asylums, or even private families can be used, but no poor house or penal connection is permitted; children's aid societies are to manage them; and a children's visiting committee shall be appointed for each electoral district to assist the Superintendent of aid societies, and they shall aim to secure homes and to encourage a philanthropic sentiment on behalf of neglected, abandoned and destitute children, and obtain money subscriptions; a judge may order the municipality to pay for the support of the children; the officers of the society may be appointed constables, and bring before the judge children begging or thieving or sleeping at night in the open air, or wandering and homeless, or found associating or dwelling with a thief, drunkard or vagrant or immoral person, or suffered

by drunken or vicious parents to grow up without salutary parental control and education, or found destitute or deserted by their parents, or because of imprisonment or otherwise. The Children's Aid Society is made the legal guardian, and decides, subject to the contrary order of a judge, whether or not, in the child's interest, it shall ever be returned to the parents

It is clear that even if successful as it deserves to be, the Ontario system will not remedy all the defects in the position of children, especially those arising through poverty. Still, taken with the excellent compulsory education provisions of that Province, much has been attempted. Whether the Superintendent, the Children's Aid Societies and the Visiting Committees will rise to the full measure of the State's duty, even within the limits of the attempt; whether enough foster-homes can be found, or cases effectively discovered, or technical flaws in the statute be overcome, will only be proven in practice. As it stands, the scheme seems to depend on the fitness of one extraordinary official. I fear that there is an irresponsibility and incompleteness about it which render it hopeless to expect it to perform the functions the State ought to perform. These functions are too heavy for charitable sentiment alone to undertake. And why leave to charity what is a *right*?

The suggestions which we uphold would include State provisions for the case of the child abandoned by its relatives, and especially for that of the foundling infant; and this leads to the difficult case of the illegitimate child. Through all history there is no class for whom my heart bleeds more. The sorrows of a few are as nothing compared to the heavy burden or the perpetual ignominy and wrong under which this innocent unfortunate has passed through life. Ought he to be left with his parents or with either of them to bear the scorn of the association or is it due him in his own right that he be taken from them, cut off from his sad history, and launched in life unstained and fully equal to his fortunate brethren? The problem has several sides and special difficulties, but I leave it, and that of his right to share the property of his parents, recording my conviction that they ought to be solved solely from the point of view of the right of the child. During the French Revolution some laws of the kind were in operation for several years, but the principles though good were applied in a bad Jacobinical spirit.

There are many questions concerning marriage, in which the same point is unconsidered, such as the prevention of the marriage of those afflicted with transmissible diseases, the forms and proofs of marriage, the conditions of divorce, dissolution of marriage, and separation as to bed and board. Circumstances sometimes arise in the course of legal practice which are so painful and insoluble that an American divorce seems the only rational remedy to prevent some still more painful outcome. Such, where there are children, should be viewed first from the standpoint of these innocent third parties to the marriage contract.

But I must not be too tedious, especially as I feel that the subject is one of great extent and that many know it far better than I. Let me therefore close with some words having a bearing on our individual duty, part of which is to agitate for State action. For who is the State? The State is you and I. We can no more throw off our duty upon the State than the State can throw it off upon the parents. A writer whose name I do not know has said, "It is not enough to teach our sons and daughters the highest things of life if the children in the back street are left untaught and uncared for.

Sooner or later in life the two sets of children meet. They may not go to the same school, but they walk the same streets. If they only occupy the position of servitor and served, yet contact is inevitable, and the evil thing which was crushed out of our nurseries may be green and flourishing among the children we neglected.

We may turn with a sneer from the women working in the slums, in the temperance associations, school board or among reformers. We may laugh at them as faddists and fanatics who should remember their duties at home. But, while we turn with self-congratulation to the sons and daughters we expect to rise up and call us blessed, do we realize that these very children are at the mercy of other people's children, that bar-rooms are tempting places built by men who in their childhood were never trained to think of the consequences of vice, that our best beloved may lose his life because a drunken coachman or a drunken engineer was not taught self-control?

Or it may be that disease and death snatch from the home the man whose virtue and nobility the world can so ill spare, because the children in the back alley have

through ignorance and carelessness scattered broadcast the germs of diphtheria and fever. "Am I my brother's keeper?" Perhaps not. But if we would guard our own children we must keep those of our brother.

Eve sorrowed over the sin of Cain when Abel lay dead across her knees. Yet Cain is but the symbol of the evil thing which neglected childhood produces and which comes creeping from every slum and stronghold of dirt and ignorance to maim and murder our loved ones."

One prediction I could add is that it is quite possible that the majority of our own descendants—even our near descendants—will be among the struggling masses. But these considerations after all appeal to our personal interests. The right of the child calls loudly out to us to listen in a different and still higher spirit. It is the call upon our conscience, not our interest.

Editorial Notes and Comments.

WE are once again approaching Empire Day, the 23rd of May.

It seems to be the general opinion among educationists that this day should not be looked upon as a holiday, but should be the occasion for giving the children definite and systematic instruction with reference to the Empire of which we are forming an increasingly important part. The Imperial Spirit is abroad and it has entered into the children in large measure. They are eager to know. Interest has been aroused by the general patriotic atmosphere by which we are surrounded. When the child is interested more than half the battle of education is won. The mere waving of flags, the shouting of "Rule Britannia" and "Soldiers of the Queen," and boasting of what we can do, will not make good citizens. Indeed we confess with much sorrow that the outward expression of loyalty is often accompanied by conduct that ill becomes a citizen of our empire.

Our children must be instructed in the duties and obligations that rest on all the individuals that compose the empire, so that, when the time comes, they may be prepared to take an honorable part in advancing its truest interests.

Without boastfulness, but as matters of fact, let us place before our children, as the coming citizens of this Dominion

of Canada, the vast resources of the country, and the great future that assuredly awaits it, if they keep pure hearts, clean lives, healthy bodies, and keen, active minds in relation to its development, in all departments of the national life, and remain true to its noblest traditions and ideals.

But knowledge without sentiment would fail to rouse to action. Sentiment has its place in stirring to life and effort. It is a good thing for the child to wave the flag and shout patriotic songs if he does it in the broader spirit of patriotism, in that spirit that can recognize good in others who do not think exactly as he does.

—It was remarked the other day that what teachers desire, in an educational magazine, is not information with regard to best methods of teaching, so that the most valuable training may be obtained from the subjects of the school course, but devices by which pupils can be crammed to pass certain examinations. Could this be true, so far as any one of the teachers of the Province of Quebec is concerned, do we realize the serious signification of it? It is making a sport, a farce of education. The working for competitive examinations is usually a curse, not a blessing. Oh, let us realize the responsibility that rests upon us to develop the child in harmony with the laws of his physical, mental, social and moral growth. Let us have nothing whatever to do with the feeling of examiners' pulses to determine what sort of questions may be expected. It is true that an examination paper set by an intelligent examiner is a valuable study for the teacher. But examination papers set for young students are not comprehensive, indicative of methods to be followed; they are, as a rule, a mere enumeration of facts on particular points of the subject.

—THE war at present being waged between the British nation and the Boers in South Africa is opening up this country to the gaze of the world. The newspapers and magazines vie with one another in producing portraits of the great men on both sides, pictures of the principal towns, of the railways, of home life among the people, and methods of modern welfare. We are seeking *centres of interest* in our school work. Here is a natural one. Now is the time to study Africa. The little boy of eight pores over the war map. "Our troops (Canadian) landed here. This railway is taking them to the front—to this point." He follows up

the lines of railway, naming the towns and who occupy them, and what is being done at the moment. Centres of interest! The boy is all the evening, drawing pictures of the soldiers, of battle scenes, where the British are always victorious. He even attempts cartoons on the war and is with difficulty induced to go to bed.

The best British thought from all quarters of the globe is being evoked on the war question, and finding an outlet through the newspapers, magazines, etc. The editorials in some of the leading papers are so good, from every point of view, that they might be used as reading lessons in the higher classes. From a literary standpoint, as well as from the grasp of affairs they indicate, they would have a fair showing beside the standard essayists, and a decided advantage in that they deal with questions of the hour, and, in consequence, have an interest in themselves which would appeal to the sympathy of the children.

Current Events.

IN the month of March the McGill Normal School lost by death two of the members of its staff, Mr. R. J. Fowler and Dr. T. D. Reed.

Prof. Fowler, who for over forty years had been instructor in instrumental and vocal music at the McGill Normal School, passed away at his residence on McGill College Avenue, Montreal, early in the month. Mr. Fowler was born at Weymouth, England. He received an excellent musical education, which he made use of at first in instructing members of titled families in England. Early in his married life he came out to Canada as tutor to the children of Sir Ben. Durban, commander of the forces, and settled in Montreal, after a year's residence at Sorel in the capacity of musical instructor to the children of the officers. Prof. Fowler was for some years organist of leading churches in Montreal, being sometimes organist of two at once. He was leader of the Oratorio Society, when the "Creation" and "Messiah" were first rendered there. Mr. Fowler had a decided taste for painting as well as for music. He was most faithful in the performance of his duties, and has been an inspiration to many teachers by his punctuality and diligence. Mr. Fowler had been absent from his school duties for about two months previous to his decease, though he had been very seldom absent before his last illness.

Dr. T. D. Reed died at the Royal Victoria Hospital, March 30th. He had been ill for some years with heart disease, but up to within a week of his death he had been able to attend to his duties at the Normal School. He knew that the end was approaching rapidly and expressed the wish that he might be enabled to finish the session's course of lectures. This he accomplished with the exception of one lecture, even preparing the examination papers in his subject, physiology and hygiene. Dr. Reed was professor of *Materia Medica* at the College of Pharmacy, was life governor of the Montreal Dispensary, and for many years was editor of the *Montreal Pharmaceutical Journal*.

—THE curriculum of McGill University is undergoing important changes in reference to the reduction of the number of subjects that may be taken by students in the third and fourth years, giving more thorough work in the smaller number of subjects, and bringing about a closer connection between the Faculty of Arts and the professional faculties of Law, Medicine and Science. The University authorities have issued a circular containing the following statements :

The subjects of the third and fourth years in the ordinary B.A. course are arranged in the following three divisions, under the new curriculum :

First, language and literature, include English, Latin, Greek, Sanskrit, French, German, Semitic languages, and comparative philology.

Second, history, philosophy and law, to include history, logic and metaphysics, moral philosophy, political science, economics, Roman law, constitutional law and history, art history, archæology, and history of philosophy.

Third, science, to include mathematics, physics, chemistry, zoology, physiology, and anatomy (in the medical faculty).

From the above divisions six courses are to be selected by each student in the third and fourth years, three subjects in each year. Each subject will be studied in lecture courses extending over not more than four hours per week, with collateral reading, and, in the case of science subjects, laboratory work. Of the whole six courses, one must be chosen by all candidates from the list of subjects (other than mathematics) included under the head of science.

In order to differentiate the B.A. curriculum from that

laid down for B.Sc. (Arts) candidates are debarred from selecting more than three out of their six courses from the science division. Free options are allowed in all other cases (except as far as regards the selecting of at least one subject from the science division), subject to approval by the faculty, or the advisory committee of the faculty.

—TORONTO University is moving in the direction of reform and unification of work. The weaker departments of philosophy, chemistry, constitutional history, geology, mineralogy, etc., are to be strengthened. The system of affiliation is to be still further carried out. Science and Law are to be brought into closer contact, as well as the theological colleges. The theological colleges will adopt a common staff for their common subjects.

—SCHOOL gardens have been introduced at Upper Canard, Nova Scotia, for the purpose of leading pupils to observe, to experiment, and to draw logical conclusions from their own work. Mr. Percy J. Shaw in the *Educational Review* states that the "pupils kept a record of the time of planting their seeds, the time taken to appear above ground, and the rate of growth afterwards. A record of the rainfall was kept, and the effect of heat and moisture on the growth of the plants was observed. The plants were studied from time to time, drawings made, and their exact size and development noted at certain periods from the time of planting. The cultivated plant was carefully compared with weeds studied and with wild flowers. No vegetables were introduced. Plants usually started in the hot-house were tried by planting the seeds in the open ground. Tomatoes gave good results in this way. The fertility of soils taken from different depths was tested, and differences in plants growing in these soils were observed and accounted for.

Many of the insects studied under the head of Nature work came from the garden. Toads were brought by the pupils and their habits observed. In one corner of the garden a tub was sunk, filled with water and used as an aquarium in which were grown polywogs and frogs."

—HARVARD University has invited one thousand native Cuban teachers to attend its next Summer session free of all charges.

—FRANCE has adopted, in relation to all government

documents, the method of reckoning time in use on the railroads of Canada. This system is to begin at mid-night and count the hours up to twenty-four.

—THERE are to be many educational congresses at the forthcoming Paris exposition. They will be divided into four sections, dealing with higher, secondary, primary and technical education.

The Congress of Primary Education will deal with the problems of school attendance, of moral education, of domestic economy and household arts, and of prolonging popular education beyond the school life.

—THE National Educational Association of the United States is to hold its next meeting at Charleston, S. C., July 7-13 inclusive.

—A PROFESSOR of Rutger's Female College opposes co-educational institutions "because they tend to merge the woman in the collegian." "The young women," he says, "lose their love for beauty and that development of personal taste which is part of womanhood's charm. They practise boyish manners and boyish mischief. They initiate the college yell and wear the college gown."

—IN Victoria, Australia, it is said that school children are carried to school free of all charge by the street railway.

—NATURE is waking to life and a new beauty. The contrast with winter's cold charms is so great that there is a natural interest in mother nature and her doings, kindled in every heart, childish or otherwise. Feed this interest with wholesome food. Both the teacher and the child need the nourishment.

—THE KINDERGARTEN IN RURAL DISTRICTS.—Mrs. Worden, of Kansas, suggests the wedge that is to open the kindergarten to rural schools. This is the study of the child by the mother, of kindergarten methods by all the teachers, and the consolidation of rural schools by the free transportation of children to centres. When public opinion rouses the mothers to say that they must have kindergartens, the teachers will be ready to instruct the children, and the state will prepare to carry the little ones to stated centres.

—IN a little country school in Virginia, weekly exhibitions were made last year with a camera and magic lantern, alternating with a microscope, in which the wonders

of the woods and fields were shown and explained to the children. The growth of the oak, from the acorn to the tree, was shown to them; the myriad of living things making their home upon a leaf, the fortifications of the ant, its house-keeping, its art of war.

The child who learns those facts about the commonplace things around it, lays hands on a world of mystery and immutable law, whose maker is God.—*The Household.*

—THE importance of a good foundation for a school-house is illustrated by the following story:—

“The magnificent new High School building in Springfield, Mass., is infested by vast hordes of rats. The school-house was erected last year at an expense of \$400,000, and is the pride of the city. Ever since the building was completed it has been known that many rats made their home in it, but not until recently have the rodents appeared in such numbers as to excite apprehension.

“Some of the older residents of the city account for the presence of rats in the school-house by the fact that the building stands where there was once an old jail, and an unused sewer runs underneath it. Through this, they say, droves of rats swarm up from the river bank into the basement.

“Until about two months ago the rats rarely or never ventured out of the basement. Of late, however, they have become extremely bold and have nearly overrun the whole building. The marauders soon discovered the lunch-room and made an assault upon it. Food disappeared so rapidly and persistently that the principal called a council of war and took stringent steps to put an end to these gastronomic feats.

“When shut out of the lunch-room the rats tried to subsist upon a literary diet. Virgil, the Anabasis and Wentworth’s geometry were among the sufferers. German and French grammars and the elements of chemistry were devoured with equal avidity. Scarcely a pupil but found his text-book mutilated.

“The teachers held meeting after meeting to consider plans for ridding the building of the pests. All sorts of traps were set, but all in vain. No trap could deceive rats that had digested the theorems of solid geometry. The School Committee proved as incompetent as the teachers to cope with the difficulty.”

Practical Hints and Examination Papers.

MAP EXERCISES.

Each month a prize will be awarded to the school that sends to the editor of the RECORD the neatest exact reply to the questions and exercises of the preceding month. No more than one reply must be sent from one school, but it may be the work of one pupil or the composite work of any number of pupils. The teacher may criticize the work during the progress, may point out that any answer is incorrect, but must not herself do any part of the work or state what is the correct answer. The reply must be posted to the editor within three weeks of the date of issue of the questions in the RECORD. The award of the editor is to be final and without dispute, and will be published not later than the third issue after the publication of the questions. The prize when received will be at the disposal of the teacher, either to reserve for school use or to give to the pupil who has most contributed to the successful issue. To facilitate the transmission of the prize, with every reply submitted must be given the name of the school the grade competing, the name and address of the teacher, and, if the reply be the work of one pupil only, the name and age of that pupil.

Correct answers will be published in the issue of the RECORD next succeeding that in which the exercise appeared.

The following exercise is open to competition only for pupils of grades not higher than 4th grade elementary or 1st grade model :

The exercises on the map this month will concern some of the British Empire's trade routes by steamship. The children are required to state in order, through what bodies of water a ship will pass in going from the first point to the farthest point named; to enumerate three articles, for purposes of trade, carried on the outward voyage, and three that are carried on the return trip. In some instances there is not a mutual exchange of products.

1. Liverpool to New York.
2. Glasgow to Montreal.
3. Southampton to New York.
4. Southampton to New Orleans via Havana.
5. Southampton to St. Thomas (West Indies).

6. Southampton to Monte Video (Uruguay).
7. Plymouth to Cape Town by Ascension and } Ste.
Helena.
8. Liverpool to Mauritius, touching at various points on
the west coast of Africa.
9. Mauritius to Melbourne and Bombay.
10. London to Melbourne by the Mediterranean Sea.
11. London to Melbourne by Cape Horn.
12. Aden to Bombay. .
13. Bombay to Melbourne by Pt. de Galle.
14. Cape of Good Hope to Adelaide and Hobart Town.
15. Victoria to Yokohama.
16. Yokohama to Hongkong.
17. Hongkong to Singapore.
18. Aden to Pt. de Galle.
19. Pt. de Galle to Singapore.
20. Singapore to Batavia (Java).
21. Batavia to Sydney.
22. Halifax to Boston and New York.
23. Montreal to Liverpool.
- * 24. Victoria to Sydney.
- * 25. Auckland to Honolulu.

ANSWER TO GEOGRAPHICAL PROBLEM.

THE EQUATOR.

General Statement.—The equator or, as it is commonly called by seamen, the line, leaving South America at the coast of Caviana, longitude 50° w., after a course of 59 degrees, 4,080 miles, strikes the west coast of Africa at the mouth of the Gaboon, under the ninth eastern meridian. Traversing the continent of Africa for 32 degrees, 2,213 miles, it reaches the shore of the Indian Ocean at the town of Juba, 41° east longitude. A course of 4,080 miles, 59 degrees, through the Indian Ocean, brings it to Mt. Ophir on the coast of Sumatra, under the one hundredth eastern meridian. Through Malaysia, a stretch of 2,213 miles, 32 degrees, reaches a point almost directly north of the Cape of Good Hope, northern-west point of New Guinea. There the equator makes its first contact with the Pacific through which it runs for 148 degrees, 10,237 miles, to Point Palmas

* These are new routes.

in Columbia, 80° w. Thence across South America to the point of departure is 30 degrees, 2,075 miles. These respective breadths, when added, give 360° , 24,898 miles, which is about four miles less than the actual equatorial circumference of the earth.

Detail.—In this voyage through the Atlantic the traveller who follows the equator would have to avoid the Island of Mexiana, which in longitude 51° w. bars his way. South of his course, when in longitude 48° he would see Cape Magnary on Joannes Island at the mouth of the Para river. Then on his lonely voyage no land would be seen until sighting the Island of St. Thomas in longitude 6° e., north of, but very close to the equator.

From the Gaboon the traveller would pass through a comparatively unexplored territory, although we know that after traversing the dense forests of the Gorilla country he would twice cross the Congo river, first at 19° e., and again at Stanley's Falls 25° e. Further on he would encounter the Victoria Nyanza lake, the chief source of the White Nile, in longitude 52° e. to 55° e. Leaving Juba the voyager would sail over the dark, profound waters of the Indian Ocean for more than 3,800 miles out of sight of land, until the island of Nias, 97° east longitude would loom up on the north; then the islands of Mintavi on the south and Baboa on the north would be just escaped in longitude 98° e. and 99° e. respectively.

Through Malaysia the equator crosses in succession the great islands of Sumatra, Borneo, Celebes and Gilolo and the small island of Geby, and grazes the northern shores of Linga and Waygiou. The eastern coasts of these islands under the equator lie respectively in the eastern longitudes 104° , 108° , 120° , 128° , 129° , 105° and 131° . Along the line the breadth of Sumatra is 270 miles, of Borneo 575 miles, of Celebes and Gilolo less than 20 miles in each case. Several important waters are crossed; the Macassar Strait 130 miles wide, Tominie Bay about 300 miles wide, the Molucca Passage 150 miles wide, and the Gilolo Passage 30 miles wide.

The first 3,320 miles of the equator, after leaving Malaysia just north of the Cape of Good Hope, lie among the numerous small clusters of Polynesian Islands, through the northern portion of the New Britannia Archipelago 150° e., north of Ocean Island 170° e., through the Gilbert Islands

175°e., north of Jarvis Island, 160°w. Then the equator runs out into the deep Pacific, sighting no land before the rugged volcanic group of the Galapagos, crossing its chief island Albemarle at an altitude of 4,000 feet in longitude 92°w.

The equator, striking the Coast of Ecuador 80°w. longitude, rises rapidly from the shore, scales the volcano Pichincha at a height of almost 16,000 feet, descends into the valley of Quito, which is more than 9,000 feet high, and again climbs the beautiful white cone of Cayambe, almost 20,000 feet high, in longitude 78°w. Having surmounted the Andes, it rapidly descends to the great forests drained by the Amazon, crossing many tributaries of that mighty river between 78° and 70° east longitude.

The Putumayo crosses the equator in longitude 76°w. and the Japura in 74°w. The equator crosses the boundary line into Brazil at the 70th meridian west, Ecuador stretching under the equator for 10 degrees, almost 700 miles. From its rise close to the boundary line a branch of the Uapes and then the main stream itself deviates but little from the equator until it empties into the Rio Negro, the greatest northern affluent of the Amazon, in longitude 68°w. In its subsequent course through an impenetrable forest region the equator crosses many tributaries of the Rio Negro, of which the most important is the Parima, which, running southward, intersects the equator at the 62 western meridian. Cutting many less important tributaries of the Amazon on its way the line crosses that great branch of the delta of the Amazon which turns northward between the mainland and island of Caviana in longitude 51° west, returning to the point of departure after a course through Brazil of 20 degrees, something less than 1,400 miles.

(To be continu. d.)

EXERCISES FOR EMPIRE DAY.

—THE problems that are suggested here for Empire Day are based on the latest statistics, mainly on those given by Sir Charles Dilke.

The extract for dictation is taken from Mr. W. D. Light-hall's introduction to "Songs of the Great Dominion."

The lesson in history might be on the relation of Canada to the Empire or the growth of the British Empire.

To further this latter end we shall publish next month an article from the London *Graphic*, "*The Growth of the British Empire*," by Sir Charles Dilke.

The exercises in geography might be those suggested for competition this month, a run around the Empire or the drawing of Greater Britain on the blackboard and slates or in scribblers.

SOME PROBLEMS OF THE EMPIRE.

—ONE HUNDRED YEARS OF EMPIRE.—In 1800 the total area of the British Empire was 2,012,182 square miles, while in 1900 it is 12,596,608 square miles. How many square miles of territory have been added to the Empire in the 100 years? The area to-day is how many times as great as it was 100 years ago?

In 1800 Great Britain held in Canada and Newfoundland 515,950 square miles, and to-day she holds, under the title of British North America, 3,618,650 square miles of territory. How much greater are her possessions here to-day? How many times as great as they were 100 years ago? What fraction of the present area did Great Britain have in 1800? The area of Canada is what fraction (or decimal) of the area of the whole Empire? Find similar results for the other possessions. How have the Indian, African and Australasian possessions increased? Which is the largest colony of Great Britain? The next in size? Answer from the following and foregoing statements:—In 1800 Great Britain held in India 200,000 square miles, in Africa 20,000 square miles, and in Australasia (New South Wales) 1,000,000 square miles; while to-day she holds in India 1,668,960 square miles, in Africa 3,748,220 square miles, and in Australasia 3,175,320 square miles.

One hundred years ago the population of the British Empire was 31,417,000 and to-day it is 414,410,000. What increase in population has there been in 100 years? Answer the following questions from the subjoined statements considering Canada, India, Australasia, Africa, etc., daughters of the empire. Which daughter is the largest? If the daughters were arranged in the order of their size, how would they stand? How do the daughters compare with the mother in this regard? Find the total population of the British Empire. The United Kingdom has a population of 40,200,000; the possessions of the Mediterranean support

a population of 420,000, India (including Native States and Beluchistan) 313,000,000, other possessions of Asia, 5,640,000, Africa (including the Soudan) 42,440,000, Australasia 4,950,000, British North America 5,400,000, and Central and South America and the West Indies 1,860,000.

THE BRITISH EMPIRE AND THE OTHER GREAT POWERS.
—The population ruled by the Queen is said to be one-third of the entire earth. What is the population of the world?

Considering the German Empire as the unit of area, give the relative areas of the six greatest powers. Taking the population of the German Empire as the unit of population, give that of the six greatest powers. Carry the answer to two places of decimals. The six powers referred to are the British Empire with an area of 11,400,000 sq. miles and a population of 400,000,000; the Russian Empire with 8,450,000 sq. miles and a population of 109,000,000; China 4,000,000 sq. miles and a population of 300,000,000; France and colonies 4,000,000 sq. miles and a population of 90,000,000; the United States of America 3,600,000 sq. miles and a population of 62,000,000, while the German Empire has 1,200,000 sq. miles of area and a population of 59,000,000.

The exports in 1897, from British and Irish produce were valued at 1,170,000,000 dollars, of which 400,000,000 went to the colonies. What fraction went to the colonies? These are important problems, for England pays nothing to her colonies directly, nor does she receive anything from them except in the form of voluntary gifts when crises occur either at home or in the colonies. France and Germany pay out large sums, the former \$14,000,000, and the latter \$5,000,000 annually for the administration of affairs in their colonies, and receive very little return in the form of trade. Other questions of interest might be taken up as the relative value to their mother countries of the colonies of the other Great Powers and the relative value of the various colonies of Great Britain.

—**GREAT BRITAIN AND CANADA.** —The Dominion of Canada imported from Great Britain in 1898, for home use, 32,000,000 dollars' worth of goods, and from the whole of the British Empire 34,526,353 dollars' worth, how much was imported from British countries other than Great Britain? Canada imports 130,698,006 dollars' worth of goods from the world. How much comes from foreign countries? What fraction of the total imports is from

Great Britain? From the British Empire? The imports from the United States are valued at \$78,705,590. How does this compare with those from Great Britain?

In 1898 the exports of the Dominion to Great Britain were \$104,998,818 worth and to the whole British Empire \$110,799,358. How much was exported to British countries other than Great Britain? The total to all other countries was \$44,122,457 worth. What was the grand total of exports? What fraction of the grand total was exported to Great Britain? To other British possessions? To the United States, when the total export to that country was \$36,454,507?

Are Canada's exports or imports the greater? By how much? Has this fact any particular significance?

—WHERE CANADA'S WEALTH LIES.—The customs' statistics show that Canada exported, in 1899, \$47,948,491 worth of animals and their produce, \$37,465,838 worth of agricultural produce, \$28,115,476 worth from the forests, from the mines \$13,521,331 worth, manufactured articles to the value of \$12,478,139, from the fisheries \$9,984,629 worth, bullion to the value of \$1,093,286, and coin to the value of \$2,916,572.

If the value of the fisheries be taken as the unit of wealth, what numbers would represent the farm produce, the animal produce, mine produce and manufactured articles?

What was the total export in 1899?

To make the arithmetic lesson profitable a map showing the whole British Empire should be consulted constantly.

These problems may be altered in form to suit the stage of advancement of the children.

—FOR the first time in the history of mankind the external commerce of a single nation, in one year, has exceeded the enormous sum of £800 millions sterling.—The *Contemporary Review*, Forty years of British Trade.

DICTATION EXERCISE.

Canada, Eldest Daughter of the Empire, is the Empire's completest type! She is the full-grown of the family,—the one first come of age and gone out into life as a nation; and she has in her young hands the solution of all

those questions which must so interest every true Briton, proud and careful of the acquisitions of British discovery and conquest. She is Imperial in herself, we sons of her think, as the number, the extent, and the lavish natural wealth of her Provinces, each not less than some Empire of Europe, rise in our minds; as we picture her coasts and gulfs and kingdoms and islands, on the Atlantic on the one side, and the Pacific on the other; her four-thousand-mile panorama of noble rivers, wild forests, ocean-like prairies; her towering snow-capped Rockies waking to the tints of sunrise in the West; in the East her hoary Laurentians, oldest of hills. She has by far the richest extent of fisheries, forests, wheat lands, and fur regions in the world; some of the greatest public works; some of the loftiest mountain ranges, the vastest rivers, the healthiest and most beautifully varied seasons. She has the best tenth-elevenths of Niagara Falls, and the best half of the Inland Seas. She stands fifth among the nations in the tonnage of her commercial marine. Her population is about five million souls. Her valley of the Saskatchewan alone, it has been scientifically computed, will support eight hundred millions. In losing the United States, Britain lost the *smaller* half of her American possessions; the Colony of the Maple Leaf is about as large as Europe.

But what would material resources be without a corresponding greatness in man? Canada is also Imperial in her traditions. Her French race is still conscious that they are the remnants of a power which once ruled North America from Hudson's Bay to the Gulf of Mexico. Existing English Canada is the result of simply the noblest epic migration the world has ever seen, more loftily epic than the retirement of Pius Æneas from Ilion,—the withdrawal, namely, out of the rebel Colonies, of the thirty-five thousand United Empire Loyalists, after the war of the Revolution. "Why did you come here," was asked of one of the first settlers of St. John, New Brunswick, a man whose life was without a stain. "Why did you come here when you and your associates were almost certain to endure the sufferings and absolute want of shelter and food which you have narrated?" "*Why did we come here?*" replied he, with emotion which brought tears. "*For our loyalty.*"

—REMINDERS FOR TEACHERS.—If you want to be a successful teacher you must find out what matters interest

your pupils. Many a child has been led to take an interest in all the work of the school by this means. Every boy and every girl has an intense interest in something. Do you know what that something is? Acquire the necessary tact to find it out. When a boy allows you to see the contents of his pockets you have a golden opportunity.

The character of the teacher is all important. He must himself be what he would have his pupils be. He must study high and noble lives that he himself may have lofty ideals towards which he can press onward.

If the teacher shows no interest in anything outside the text-book, the pupils will believe that the text-book is an end in itself. The best teachers are those whose interests are broadest. All history teaches us this.

—A MAN is known by what he laughs at.—*Thomas Carlyle.*

—THE question of compulsory education is settled so far as Nature is concerned. Her bill on that question was framed and passed long ago. But like all compulsory legislation, that of Nature is harsh and wasteful in its operation. Ignorance is visited as sharply as wilful disobedience; incapacity meets the same punishment as crime. Nature's discipline is not even a word and a blow, and the blow first; but the blow without the word. It is left to you to find out why your ears are boxed.—Prof. Huxley, "A Liberal Education".

—AT the close of a lesson in dictation, the teacher, having a few minutes to spare, asked the children for synonyms of the more difficult words. These were written on the board and all but the most appropriate crossed through. Then the children were asked to read over the story, putting in the best words that had been suggested. It was observed that the writer of the story had in almost every case better words for the circumstances than any supplied by the children. The exercise was very much enjoyed by the class and was an excellent lesson in the use of words.

—WHAT the Empire does for the boys and girls of Canada, and what the children of Canada should be in order that they may become worthy citizens of this great State, might serve as a subject of conversation in regard to civics.

—SEAT EXERCISES THAT MAY PROFITABLY FOLLOW A READING LESSON.—Until the children know how to study, they must be given some tangible work to do during the

preparation hour, and this tangible work is a good thing all along the line.

- The little folks may be required to :
- Write all the questions in the lesson.
- Write all the quotations.
- Write the two-syllable words.
- Write the proper names.
- Write all the words they cannot pronounce.
- Write ten nouns.
- Write ten verbs, etc.

Where you have a lesson containing many difficult words, words whose meanings must be looked up in the dictionary, you will find it very profitable to require the pupil to insert the *meaning*, in place of the difficult word. This plan insures the selection of a definition which will make sense, and when the reader comes to use the new word, he thinks of the meaning, and, therefore, gives an intelligent rendering.—*Midland Schools.*

TOPICS FOR APRIL NATURE STUDY.

RETURNING BIRDS.

We watched them leave us last fall. Let us look for their return. Encourage children to notice which come first. Do they come alone or in flocks? What food do they eat? Where do they hide from cold and storms? Do they sing at first? Do they sing to *you* or to birds? Does the bird sing to one of its own kind or to birds of another kind? Where do the first birds nest? What material is used and why?

Many such questions should be asked the children, to incite them to observation. Teacher and children may learn together.

SPROUTING VEGETABLES.

The cellar is an interesting field for study. What vegetables sprout first? Why do they sprout? Which way do the sprouts grow? Try to *make* them grow *away* from the light. What is the color of the sprouts? Put the white sprouts in the sunlight. What change? How do sprouted vegetables taste? (Sweet.)

SEEDS.

Plant seeds in pots or boxes. Study the mode of germination. In one box have wheat, corn, barley and oats; in another plant beans, radish and morning glory seeds.

Children should discover other things; that the corn and some other grains have one seed-leaf and push out, while the bean and others come up *doubled over*, and have two seed-leaves.

INSECTS AND WATER ANIMALS.

Watch spiders, flies, butterflies and bees. As soon as possible look for frog's eggs, snails and crayfish. Put these in wide-mouthed bottles. Various questions should be asked the children, as: How do these water animals breathe? Why put them in wide-open dishes? Of what use are water-plants?

BUDS.

The buds have begun to swell. Let children gather different kinds of twigs. They may be led to see some are woolly, others varnished. Let children tell what they see. Have a sorting lesson. Let children take specimens home and tell what they have learned.—*School Education.*

—THE BIRTHPLACE OF THE EMPIRE.—It is a noteworthy fact that the various colonies of Great Britain were added to the Empire by men who sailed from Plymouth, in Devon. Elihu Burrit, an American, when visiting England wrote "Plymouth, mother of full forty Plymouths up and down the wide world, that wear her memory in their names, write it in the baptismal records of their children, and before the date of every outward letter."

—EVERY school, in the true sense of the word, is a living organism, therefore every act of discipline tends to form character. Where there is punctuality you are forming character, where there is an orderly arrangement of work you are forming character—you are taking pains and becoming a strong and noble man or woman. In mathematics, when you are satisfied with nothing short of the exact answer, you are forming character. The boy at his Latin, who keeps pegging away till he turns an awkward into an elegant translation, is forming character. These are the elements which go to make a manly man.—*Dr. J. A. McLellan.*

SOME DUTCH NAMES AND TERMINATIONS FOUND IN
CURRENT HISTORY.

(From *T. Nelson and Son's Transvaal War Atlas*.)

- AFRIKANDER, a white man born in South Africa of European stock.
- BERG, a mountain, as in Heidelberg.
- BOER, a tiller of the ground. The name is commonly applied in the plural to the whole of the Dutch population.
- BURGHER, a European male in possession of the franchise, and liable for public duty.
- COMMANDANT, a military leader. *Commandant-General*, the head of the military.
- COMMANDEER, to call out for military service.
- COMMANDO, any body of burghers called out on military duty.
- DOPPER, the Puritanical, ultra-Conservative, and more retrogressive sect of the Boer Church.
- DORP, village, as in Krugersdorp.
- DRIFT, ford, as in Rorke's Drift.
- FIELD CORNET, a sort of sub-magistrate of the Transvaal, exercising ill-defined powers, mainly military.
- FONTEIN, a spring, as in Bloemfontein.
- HOLLANDERS, Dutchmen from Amsterdam. They occupy many of the most important posts in the Government service.
- INSPAN, to harness or yoke. *Outspan*, to unharness ; to halt.
- KLOOF, a ravine or declivity on a mountain.
- KOP (or KOPJE), a hill, as in Spetz Kop.
- LAGER (or LAAGER), an enclosure set up for protection, frequently made by lashing wagons together.
- LANDROST, a stipendiary magistra'e who administers justice and receives the revenues of the district.
- NEK, an opening, as in Laing's Nek.
- POORT, an opening between mountains, as in Komati Poort.
- ROOINEK, English "red neck ;" the Boers' name for an Englishman.
- SLUIT, a ditch.—SPRUIT, a stream, as in Bronkhorst Spruit.
- STADT, a town or village, as in Kroonstad.
- TREK, an exodus or emigration.—VELDT, an open plain.
- VOLKSRAAD, the people's council.
- ZARP (Z. A. R. P.), the South African Police.

—CO-EDUCATION OF BOYS AND GIRLS.—“Up to a certain age I am convinced that it is the right thing to educate boys and girls together,” said an experienced teacher recently, “and I regret very much that it seems impossible to make this innovation in private schools. Little girls are naturally too narrow in their tastes. They talk of nothing when with each other but clothes and gossip. Companionship with boys would correct this in a great measure. Not that the latter are any more clever; on the contrary, I have always found girls brighter with their lessons; but boys are not so petty—they care more for games and the healthy interests of childhood. On the other hand, boys on their part are greatly improved in their manners by early association with girls; they lose the awkwardness and shyness which later on are so difficult to overcome.

“I have taught in private schools for girls for the last few years, and have really worried about the way they talk to each other at recreation time. I cannot help overhearing a good deal as I go to and fro among them, and I often wonder if their parents have any idea of the way they rehash society gossip, or of their vain, pretentious chatter about clothes. I long to start a school where I can have boys and girls together and make a specialty out of study hours of good, healthy, interesting games suited to the tastes of both. I think it might be done, and that it would do away with the serious evil that I speak of.”—*New York Daily Tribune*.

Books Received and Reviewed.

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

THE CANADIAN RECORD OF SCIENCE, the publication of the Natural History Society of Montreal. No. 2, Volume VIII, of this excellent magazine has recently appeared and quite sustains its usual instructive and interesting character.

The leading articles are “Studies in the Geology of Montreal and vicinity, which might be undertaken by members of the Natural History Society,” by Prof. F. D. Adams, Ph.D.; “Phenological Observations in Canada,” by A. H. Mackay, LL.D.; “Botany in the Island of Montreal,” by Rev. R. Campbell, M.A., D.D.; “The Lake-on-the-Moun-

tain near Pictou, Ont.," by A. T. Drummond, LL.D., and "The Parent-Rock of the Diamond in South Africa," by T. G. Bonney, D. Sc., LL.D.

The first four of these are written especially with the object which the *Record of Science* keeps in view, that of popularizing the study of natural science in Canada and of directing the observations of amateurs into channels of permanent usefulness to science. The first and third are of necessity particularly important to those residing in the vicinity of Montreal, but they also serve as types for the pursuance of similar studies elsewhere.

In the first article, Dr. Adams, Professor of Geology at McGill University, whose inspiring address on the teaching of Physical Geography at the Convention of 1898 will be remembered by all who heard it, points out the valuable assistance to the advancement of the Science of Geology that may be rendered by local observers around Montreal. The Island of Montreal and the surrounding country are underlaid by strata of Lower Silurian age which are nearly horizontal in position. In the numerous exposures of these, as at the Mile End quarries, St. Helen's Island or Point Claire, a great abundance and considerable variety of fossils may be easily collected. They may be identified by reference to well known publications and then may be classified and arranged. Through these rocks a volcano once burst, whose upper portions have long since been worn away by decay caused by rain, frost and other agencies. The remaining "stump" constitutes the present Mount Royal, in which many different kinds of igneous rocks, exceedingly rare, as well as minerals of great interest and rarity are to be found.

Then in the gravels and clays there is room for much study. These contain many shells, often sea-shells which are found nearly to the top of the mountain, showing the former height of sea-level.

Records of the borings of deep wells lead to the fascinating subject of underground waters, while the study of the influence of geological formations and topography upon the course of human settlement and habitations forms one of the vital questions of Physical Geography.

The Rev. Dr. Campbell, the veteran botanist of the Natural History Society, contributes an historical sketch of the advancement of historical work on the Island of Montreal.

This is prefaced by a reference to the features which make the island one of unusual promise to the botanist. As a meeting place of large rivers, whose sources are far apart, and as a railway centre of importance, it receives a wide variety of seeds, while the varied geological conditions produce soils suited to the different series of plants.

Amongst the earliest recorded botanical researches in this interesting field were those made by Dr. Holmes between 1820 and 1823. The list of workers since that date is quite a long one, including amongst others Mr. D. A. P. Watt, Sir William Dawson, Prof. Penhallow, and Prof. Macoun.

Dr. Campbell has pursued his investigation in the island since 1885, and has recently described the Ferns, Club-mosses and Horsetails, the first named in conjunction with Dr. H. B. Cushing.

In the suggestions for future work with which the paper closes, a division of the work is advised. By this means it is urged that the entire flora of the locality may be catalogued with greater completeness and much sooner than by disconnected individual work.

"The Parent Rock of the Diamond in South Africa," by Prof. T. G. Bonney, of the University of London, is a paper recently presented to the Royal Society. The diamond, the exact source of which has been the subject of much investigation, is now found to occur in an igneous rock Eclogite, which forms part of a peculiar breccia at Kimberley, South Africa, one of the scenes of the present Boer war.

The article by Dr. A. H. Mackay, Superintendent of Education for Nova Scotia, on "Phenological Observations," is of especial interest to teachers. It contains a record of the "Local Nature Observations" made in the schools of Nova Scotia for the past two years as a part of their course of "Nature Studies," and also of certain observations made elsewhere under the direction of the Botanical Club of Canada. The phenomena recorded are such as the first appearances in each year of the common plants, birds and animals, as well as peculiarities of weather, etc. The observations are made by the pupils under the direction of the teacher. There are many valuable suggestions in the explanations of the methods and analysis of the results.

The paper of Dr. Drummond deals with the depth, temperature, and shore formation of a lake near Pictou, Ont.,

and traces the source of its underground supply of water to the highlands at the north.

It suggests a line of investigation that might well be applied to many of the lakes of this province, and by whom better than by our teachers?

The *Record of Science* is published quarterly and can be obtained by members of the Provincial Association of Protestant Teachers, through the Committee on Periodicals, along with the privileges of membership of the Natural History Society, for \$1 per year, which is one-fourth of the regular rate. Teachers of natural science especially cannot be too strongly urged to avail themselves of this offer.

JOHN A. DRESSER.

Richmond, January 29th, 1900.

BELL'S ILLUSTRATED LATIN READERS.

These books entitled *Scalæ Primæ*, *Scalæ Mediæ* and *Scalæ Tertix* as their names imply are graduated exercises in Latin reading. The first consists of simple stories either taken from classic authors or based on classic models and is intended to furnish connected reading to accompany the Latin grammar. The *Scalæ Primæ* is easier than any classical author, and is graded as to difficulty, the sentences being short at first and increasing by degrees in complexity of structure. In this work the story of the Trojan War is thus told :

1. Helena Lacedæmoniorum regis filia erat.
2. Hæc virgo Menelao, nobili duci, desponsa est.
3. Paris autem, Trojani regis filius, hanc virginem amavit.
4. Itaque Helena cum Paride Trojam profugit.
5. Quam maximum possunt numerum navium et militum cogunt.
6. Tum Græci naves conscendunt et Trojam proficiscuntur.
7. Mox in Asiam perveniunt et naves in aridum subducunt.
8. Tum novem annos ab utrisque bellum gerebant.
9. Decimo autem anno Græci rem conficere conantur.
10. Per dolum atque insidias oppido potiri meditantur.

The *Scalæ Mediæ* consists of extracts from Eutropius and

Cæsar and is somewhat more difficult in character than the *Scalæ Primæ*.

The *Scalæ Tertiæ* has graduated extracts from Cæsar, Nepos, Phædrus and Ovid.

These books have a continuity of thought that is lacking in the majority of elementary Latin text-books while they do not carry the idea of continuity to the point of weariness as is the case with a minority.

Official Department.

NOTICES FROM THE OFFICIAL GAZETTE.

DEPARTMENT OF PUBLIC INSTRUCTION.

His Honor the Lieutenant-Governor has been pleased, by order in Council, dated the 22nd day of February, 1900, to appoint Dr. Cedric L. Cotton, member of the Legislative Assembly, for the County of Missisquoi, of Cowansville, a member of the Protestant Committee of the Council of Public Instruction, to replace Dr. R. W. Heneker, who has resigned.

6th March.—To erect into a district school municipality, under the name of "La Présentation de la Sainte-Vierge," in the county of Jacques Cartier, the parish of that name, with the same limits as are assigned to it as such parish by the proclamation of the 11th of July, 1895, with moreover the Dorval Islands, No. 1,027, of the cadastre of the parish of Lachine, in the same county.

This erection is to take effect only on the 1st July next, 1900.

Dissolution of the Dissident School Corporation of Ville-Marie, in the County of Pontiac.

Order in Council of the 17th of March, 1900.

His Honor the Lieutenant-Governor has been pleased to order that whereas the dissentient trustees of the municipality of Ville-Marie, in the county of Pontiac, have allowed a year to elapse without having any school, either in their own municipality, or jointly with other trustees in an adjoining municipality, and have not put the school law

into execution, and do not take any steps to obtain schools, to declare that the corporation of the trustees of the dissentient schools for the said municipality of Ville-Marie, in the said county of Pontiac, is dissolved, and it is hereby dissolved, the whole pursuant to the statute in such case made and provided.

17th March.—To appoint Mr. Fidèle Boudreau, school commissioner for the "Pointe aux Esquimaux," county of Saguenay, to replace Mr. Epiphane Richard, whose term of office has expired.