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THE CANADA

EDUCATIONAL MONTHLY

DECEMBER, 1898.

THE ONTARIO EDUC'L SYSTEM AND VOLUNTARY SCHOOLS.

LAWRENCE BALDWIN

Barrister, etc.

The Ontario Public School system has in it much to be commended; but while it is so generally lauded surely we cannot be so blind as to see no defects in it, or so provincial in our conceit as to ignore the practical work and experience of other countries. Before considering any definite proposal which might strengthen the Ontario Public School system and increase its influence, let us view some aspects of its practical work. That it is mechanical, no one can deny. It aims at turning out every child educated in a Public School in accordance with a general average. It takes no account of one child physically strong and another physically weak, one mentally strong and another mentally weak. It cannot concern itself about the future calling or position of its pupils, except as limited to each school section as a unit, and then only governed by the law of general average. So mechanical has this system become that no one, I venture to say, takes the least interest in the election of trustees as educationalists. The restrictions in our system reducing the whole to a machine have, I believe, deprived the parent of any interest he might otherwise have in the schools, and he cares less who controls them. We never hear of a trustee seeking election on any policy looking to the betterment of the system, or the work accomplished thereby. In common decency the aspiring trustee parades, at the time, economy and efficiency as the grounds for his election, and then, alas! that is the last we hear even of these.

So mechanical is the system that no parent can take any personal interest in the education of his children. What interest can he take when he has no choice? But to the school of his section his children must go whether he likes it or not, whether this school is suitable for his children or not. This has a very serious effect upon the relationship of parent to child. It is acknowledged that the responsibilities resting on a parent towards his child have the best possible influence with him for good. And in so far as the State assumes to lift this responsibility from the shoulders of the parent an injury is done to the community. Again, how is it that the average length of service of a Public School teacher is so short, and that so many use the position simply as a stepping stone to other walks in life? Is it not that the limitations and restrictions in our system give no opportunity for the capable teacher to put forth his best efforts and to reap his due reward? Like the school trustee passing on to aldermanic and parliamentary honors the Public School teacher forsakes his calling as a teacher, and takes to some other more lucrative profession, all the public money spent upon his train-

ing in the Normal School and School of Pedagogy being lost to the State. Notwithstanding all this some refer to the Ontario system as a liberal and efficient educational system. How can it be liberal and effective, I ask, when it is so restricted both in quantity and quality? Even the practical results of its own restricted sphere of work are at times severely criticized, and acknowledged to be an inadequate return for the cost of maintenance.

John Stuart Mill says: "That the "whole or any large portion of the "education of the people should be in "State hands, I go as far as any one in "deprecating; all that has been said "of the importance of individuality of "character and diversity in opinions "and modes of conduct involves, as "of the same unspeakable importance, "diversity of education. An educa "tion established and controlled by "the State should only exist, if it exist "at all, as one among many competing "experiments, carried on for the pur- "pose of example and stimulus to "keep the other up to a certain "standard of excellence."

Now, will the affiliation of Voluntary Schools, with our present system, accomplish any good? Let us consider, for a moment, what we mean by the affiliation of Voluntary Schools. At the present time we have in existence many private schools which, according to their efficiency, or special inducements, attract the interest of parents who see in such schools an opportunity for securing some instruction, or some accomplishment, not obtainable in our Public Schools. At present these schools stand apart from our State system of education, and it naturally follows that, in order to have sufficient income to maintain efficient work in them, the standard of the fees must be made so high as to be prohibitive to the average citizen, who already has very probably paid heavy taxes towards the support of the Public School. These private schools can thus alone be patronized by the wealthy class; while the less fortunate in this world's goods are forced to limit their children's education to the restricted, illiberal, and possibly inefficient Public School of his section. In the affiliation of Voluntary Schools we contemplate the recognition by the State of all the splendid work accomplished by private enterprise under certain conditions. The usual conditions required in Voluntary Schools before receiving recognition by the State are properly qualified teachers, a proper standard of efficiency in the secular instruction pertaining to elementary education, and public inspection. When the Voluntary School has satisfied the State as to the efficiency of its work, it is recognized as a State School, and entitled to a grant from the public funds in proportion to the number of children educated therein.

In order that I may be more explicit, let me here set out a definite scheme for the recognition of Voluntary Schools as part of the State system of education.

NATIONAL SCHOOL SYSTEM RECOGNIZING VOLUNTARY SCHOOLS.

"TAXATION."

1. All ratepayers to contribute to a common building "fund" necessary to meet the cost of providing accommodation for all Public School children not attending Voluntary Schools.

2. All ratepayers to contribute to a common educational "fund" necessary (with the Government grant) to meet the cost of imparting elementary secular instruction to all the children attending Public Schools (including Voluntary Schools).

"VOLUNTARY SCHOOLS."

3. Any school conducted in a suitable building provided at the cost of its supporters and (a) having an aver-

age attendance of at least thirty pupils maintaining a standard of efficiency in secular subjects and (b) using the Public School text-books and (c) employing as teachers only those holding Public School certificates, to be entitled, on the written application of at least twenty heads of families resident in the school district, to have such Voluntary School placed on the list of Public Schools subject to the same inspection, and to share in such educational fund according to the average attendance, as in the case of other Public Schools.

INSTRUCTION IN SPECIAL SUBJECTS.

5. In Voluntary Schools special classical, scientific, commercial, mechanical, religious, or other instruction may be imparted to the pupils. Provided, however, that it in no way interferes with the efficiency of the work of imparting the elementary instruction required by the State curriculum.

Let me explain by example the working out of such Voluntary School system. Let us assume that we have a locality with one Public School building with ten class-rooms, accommodating 500 children; and that this building is accessible to all who require to make use of such school. This school may be sufficient for a time to accommodate all the children of that locality; but as the population increases a greater demand will be made on the school than it can meet. The trustees are then forced to the expedient of procuring a new site or renting rooms elsewhere. Let us assume that over and above the cost of providing accommodation it costs on an average $10 per annum to instruct each child attending the Public School. In the above example this would amount to $5,000. Now, in order to meet a demand for increased accommodation, should the trustees decide to erect a new school building, they must first expend a large amount on the site and the erection of buildings, and then continue to expend at the same rate $10 per annum for each child. Let us assume that increased accommodation is required for 200 children. Let us also assume, for instance, that there are two religious bodies in the community having suitable buildings under their control, each capable of accommodating 100 children; together they would meet the total demand for increased accommodation. All the children would be provided for, and the municipality saved the expense of procuring a site and erecting buildings.

Let us consider one of these Voluntary Schools in working order fulfilling all requirements as to elementary secular instruction. This Voluntary School would be entitled to an annual grant of $1,000, no more than the cost of imparting the same secular instruction to the same number of children in the Public School. To maintain all the work desired in such Voluntary School it may be necessary to raise additional funds by voluntary subscriptions, or fees from those in sympathy with such school, or availing themselves of its privileges.

Now, what reasons are there for hoping that Voluntary Schools will receive such support? First, the fact that one can obtain in them for his or her children religious instruction. Secondly, the desire in educating children to obtain something more than we have a right to obtain in Public Schools at public expense. If these reasons do not exist in any one section of the community no demand will there be made for the introduction of Voluntary Schools and the Public Schools will accomplish the work as at present.

Let us assume that the municipal grant of $1,000 is supplemented by a voluntary grant of a like amount. We would then have $2,000 to expend on the education of 100 children instead of only $1,000. In this way parents

would be able to procure a better education for their children, and the State reap an advantage in having even a portion of the community more liberally educated; and at a smaller cost to the State than under existing circumstances. By the introduction of Voluntary Schools, and their affiliation with our present Public School system, parents could associate themselves together in order to secure for their children, by united effort, an education, not alone embracing the elementary secular instruction required by the State, but also other, and possibly better, secular work. Voluntary Schools would afford opportunities to religious bodies to secure for the children of their own communion the religious instruction they desire, dogmatic or undogmatic as they please. "Financially it seems to me to be the height of folly," writes the Duke of Argyle, "to discourage the greatest of all agencies—zeal for religious truth—"in persuading men to support efficient Voluntary Schools in which they "take an earnest interest. I should be "prepared to deal equally with all "voluntary societies, and all churches "in paying them for their work as tested "by such methods as may be deemed "best." That Voluntary Schools would save our municipalities a large amount now expended on sites and buildings is shown by practical experience in other countries. They will certainly be found to be a means by which large sums may be saved in any city or town in Ontario where the population is dense enough to justify their introduction.

The taxation necessary for the maintenance of the present system of Public Schools is now recognized to be a heavy burden on the community. An item of considerable importance in the expense is the amount required for the purchase of school sites and the erection of school buildings. For example, in Toronto we find that the average cost for each child for accommodation alone is about $50. That is to say, in a school accommodating 500 children, the site and buildings have cost the municipality $25,000. Now, assuming that we should have only ten Voluntary Schools in Toronto, each accommodating 100 children, in the aggregate this would represent 1,000 children, or what is equivalent to two ordinary schools. The city might be saved in this way the direct expenditure of $50,000. At the same time the secular instruction would be at least as efficient in the Voluntary Schools as in the Public Schools, and the cost to the municipality of imparting the same secular instruction no greater than in the Public Schools. As a matter of fact, Voluntary Schools must be more economical to the municipality, because, while no public money will be expended on them unless the work they accomplish is up to the required standard, in Public Schools the money will be expended no matter how inefficient the work in any one of them may be. Further, Voluntary Schools will enable an association of parents to do more for their children than can be done in an ordinary Public School. In other words, they will enable parents to build upon the elementary work of the Public School, and to add to this, at their own cost, other instruction, and possibly more thorough secular instruction, without adding any additional burden to the taxpayer.

Another matter worthy of consideration is the fear of the spread of contagious diseases. This danger is five times greater in one school of 500 children than in five schools of 100 children each; in addition, the loss when the school has to be closed on this account would be proportionately less in the case of Voluntary Schools, where isolation would be more complete and more easily obtained.

One great objection brought against

the Voluntary Schools in England, where such schools are the National Schools of the country, is that in localities where only one school exists and that a National School, namely a Voluntary School under the control and management of the Church of England, Non Conformists must send their children to it, while at the same time they conscientiously disapprove of the religious instruction imparted therein. No such objection could be made in Ontario. The present Public School system is well established so far as it goes. There would be in every district at least one Public School common to all. Voluntary Schools would only be introduced where the population is sufficient to justify such a step. Their introduction can in no way injure the efficiency and work done in the Public School, nor trample on the rights of any; while it is admitted by practical educationalists that they would vastly improve the general education of the country.

The Ontario Public School system is surely needlessly restrictive. By the affiliation of Voluntary Schools we would introduce just that flexibility that is needed to make the system thoroughly effective and national in character. Their introduction would arouse parents to a greater realization of their responsibilities in the matter of the education of their children. Besides they would promote the interest of the teachers, and induce the capable instructor to continue his devotion to so important a calling because he would know that more than average ability in the teacher might command more than an average recompense. They would also hold out to him the possibility of enlarging his sphere of usefulness beyond the restricted curriculum of the Common School.

If I am wrong in principle or practice in my advocacy of the scheme which I have proposed I am anxious to discover the fallacy of my position; but when I find the principle of Voluntary Schools supported by "Methodists," "Presbyterians," "Anglicans," "Romans," "Undenominationalists" and others, and in fact acknowledged in Ontario to some extent in our State University with Voluntary Theological Colleges affiliated, and again in such schools as Upper Canada College, the Model and High Schools, and Collegiate Institutes I ask why cannot the principle be applied generally to our Public School system which can be done by the affiliation of Voluntary Schools.

I have referred to the religious bodies in the practical working out of the Voluntary School scheme, because they have a recognized place in our midst, and further because they already have buildings attached to their places of worship which might readily be made available for school purposes, and in fact some of these are now used as Public Schools. The fact that these buildings, many of them quite costly, now stand idle for six days of the week makes it quite plain that in them there is a considerable financial loss which might be avoided were it possible to make use of them for educational purposes.

Some fear that in Voluntary Schools we see the State undertaking to impart the religious instruction peculiar to one or other religious communion. But it is really nothing of the kind. On the contrary it is the Voluntary School which, while imparting the religious or other special instruction desired by parents, undertakes to impart for the State the elementary secular instruction of the Public Schools, and this under State inspection and by teachers authorized by the State. The cost of maintaining any special instruction outside the curriculum of the Public School will be met voluntarily by the supporters of such schools.

Others fear that the introduction of any such Voluntary School scheme means the breaking up of our Public School system. In England and elsewhere Board Schools have grown in the face of well-established Voluntary Schools, and it is perfectly right that for those who are enamored of an educational system without religious or any other special instruction, they should have schools to their liking, provided that in them there is no lack of efficiency in the elementary secular instruction required by the State. How, then, will the affiliation of Voluntary Schools break up the Ontario schools? If it is true that private enterprise could in this way surpass the work and efficiency of the present Public School, and by so doing attract the children of the community to such an extent as to injure the Public Schools, the sooner we remodel our system the better. If our present Public Schools cannot stand competition, what value are they to the public? I believe that, as a matter of fact, the affiliation of Voluntary Schools will extend the influence and work of our State system of education, and make the system thoroughly national and complete.

The introduction of Voluntary Schools needs no revolution in our present system. It is, as I have stated, but the extension of the same system, and the harmonizing of individual effort with what is already well established.

PUBLIC SCHOOL LEAVING EXAMINATION.

PRIN. E. H. ELLIOTT, Maple Public School, Ont.

That the P. S. Leaving Examination has been much in evidence of late is to state the matter very mildly. That it has so developed in magnitude that it has become one of the burning questions connected with the weal of the Public School is not to put the matter too forcibly. If it is true that ninety-five per cent. of all in attendance at School belong to the Public School, it is therefore a truism to assert that all influences and conditions which tend to increase or diminish the efficiency of the Public School are of supreme importance.

It was noticed a few years ago that the Entrance Examination was evidently the limit in education, so far as a large proportion of the school population was concerned, so to retain this large proportion in our Public Schools another year, not to send to the High Schools better equipped pupils, the P.S. Leaving Examination was launched upon the already over-crowded Public schools and the suffering teachers. However, the great majority of teachers, feeling it to be lamentable that parents would allow their children to end their school-days with the Entrance Examination when many of them would make, if not brilliant students, at least men and women of influence in their community, lent their sympathy and support to this worthy scheme.

Unfortunately this examination has been sadly abused and diverted from the primary object it had in view, and, instead of its being taken only by those pupils who did not intend taking a High School course, we find that in many places it has largely been substituted for the Entrance Examination to High School.

We believe it to be quite within the bounds of truth to assert that, since its inception, the number of Public School Leaving certificates has not averaged twenty-five per county,—and this examination was intended to be the goal

for which the 95 per cent. who never attend a High School should aspire.

Where lies the difficulty? Do the High Schools attract all the senior pupils as soon as they are ready for Fifth Form work? Are Public School teachers not properly qualified? Have teachers of rural scholars too little time to perform so much work? Is the examination too difficult?

No doubt the High Schools have, in the past, been guilty of attracting the cream of the senior Public School pupils, but this fact is not to be deplored for, perhaps, in nearly every case where a pupil begins a High School course he continues it for more than one year, thus advancing farther than he would had he remained in the Fifth Form of the Public School for a single year. Further, no one, we believe, would argue for the retention of this class in the Public School merely to prevent it attending High School.

Are Public School teachers properly qualified to teach the Fifth Form? If they are not, it is a reflection either upon the High School programme or upon the work done in High Schools. Granting there were some grounds for such an assumption in the past, in the case of Third Class teachers, this difficulty must now speedily disappear with the abolition of Third Class certificates.

Have teachers of rural schools too little time to perform so much work? Rural school teachers, who have not had experience in this work, will, we believe, be quick to answer in the affirmative. But those who have attempted the work have been surprised that it causes no more friction than it does. Those teachers are scarce who are too busy to do something which they are fond of doing, which they feel their duty to do, and which they have the ability to do. Yet, right here, we are bound to say, lies a very great and serious difficulty, one which, to a considerable extent, handicaps the teacher who attempts to do Fifth Class work in a rural school. He has practically to solve the problem of how to do eight or nine hours' work in six hours. How can the work be done advantageously?

When we remember that this is a Public School Leaving Examination we do not feel inclined to decry it on the ground of its being too difficult, for it is intended to represent the education which the boys and girls of Ontario are given during their whole school course. Yet it is doubtful if any High School teacher would be willing to accept this examination as a test for promotion from his First Form to the Second Form. This we consider to be one of two causes which led to the great number of failures last July. The papers, especially in English Grammar and Arithmetic, were too difficult.

Now, since it is evident that the existing condition of affairs is unsatisfactory, let us ask and briefly answer what is the nature of the programme that should be provided for advanced pupils in rural schools? It should be borne in mind that the majority of these will never attend a High School, and therefore the work should be of such a character as will prepare them for their peculiar life's work and for the enjoyment of life rather than work that will give them a certain standing in a course they never intend to take. Algebra and euclid should be unmercifully dropped from the course. A superficial knowledge of them can be of no practical value. The arithmetic course is properly considered too long, Public School Leaving candidates being asked to do nearly the same work as Primary candidates. Such an important subject, however, should not be neglected —especially commercial arithmetic, dealing with interest, taxation, insurance and annuities. Composition also should receive much attention, for the man or woman having the power of elegant expression, oral and written,

is thereby relieved of that apparent lack of refinement, or rusticity which too often clings to those who have always lived in the country. From the fact that a fondness for the beautiful in literature is capable of giving so much pleasure, English literature should therefore receive all the attention possible. Elaborate book-keeping, such as is required for the Leaving Examination, is not required in the country. The drawing up of accounts, the filling out of promissory notes, cheques, etc., might be very well taught in connection with commercial arithmetic.

Drawing does not perhaps occupy too much of the country boy's time. Much of the time spent in this work might more profitably be spent in an examination of plants, when skill in drawing their various parts would be acquired. To these subjects might be added the history of our own country, and a simple course in science.

It is generally supposed that the teaching in the rural school must of necessity be inferior to that in graded schools, from the fact that in the graded schools only one grade of pupils has to be attended to; but this will depend in large part upon the teacher. It is an undisputed fact that there are many rural schools where the results are superior to those in graded schools. In the ungraded rural school many of the great men of our country have received their training. The judicious teacher of an ungraded school will at times see the advantage of economizing time by combining various classes in certain subjects. The ingenious teacher will find many ways to teach a class that is composed of pupils of unequal attainments. It is not our purpose to show how this can be done, but to say that it must be done. The possession of this ingenuity, along with teaching-power, energy and sympathy, will go far in aiding the rural teacher to overcome the many difficulties which confront him.

But, when all the circumstances are considered, it does seem that the Public School teacher has a grievance. The maturity of mental development expected in pupils so young, the extent of the work to be covered in a year, along with the vast amount of work required to be done with the lower classes, tend very seriously to accentuate the difficulties of conducting a Fifth Class in the rural school. Although few would grant that the best results of teaching can be calculated in per cents., yet the efficiency of the teacher is very often measured by examination results, and much has to be conceded to this would-be practical age, which demands tangible results. We are not contending so much for the abolition of the Fifth Class as for an opportunity to do good work. This, we believe, might be to a large extent effected were Fifth Classes excluded from schools having less than three or two teachers, and were some such changes in the programme as those suggested above adopted, so that the work can be covered in one year.

The largest school for manual training in Sweden, in the city of Naas, celebrated its twenty-fifth anniversary. All those who wish to teach manual training in any form go there for a thorough preparation and have elaborate courses of study. All instruction is given free of charge and includes pedagogics of manual training, history of pedagogy, psychology, drawing, woodwork and gymnastics. Materials, tools and dwellings are furnished by the government; articles produced are the property of the maker. The number of teachers studying here is over 200 annually. Many foreign teachers from Germany, England, Scotland and Denmark go there for professional training.

THE PROFESSION OF CIVIL ENGINEERING.

By Stephen M. Dixon, M.A., A.M.I.C.E.,

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To find a definition of engineering we will go back to the year 1818, when the institution of civil engineers was founded. In the charter the institution is defined as "A Society for the general advancement of Mechanical Science, and more particularly for promoting that species of knowledge which constitutes the profession of a Civil Engineer, being the art of directing the great sources of power in nature for the use and convenience of man, as the means of production and of traffic in states both for external and internal trade, as applied in the construction of roads, bridges, aqueducts, canals, river navigation, and docks, for internal intercourse and exchange, and in the construction of ports, harbors, moles, breakwaters, and lighthouses, and in the art of navigation by artificial power for the purposes of commerce, and in the construction and adaptation of machinery, and in the drainage of cities and towns."

But since 1818 engineering has been revolutionized by the introduction of steam, which not only made possible works of much greater magnitude than could have been attempted before, but added to the already numerous branches of the profession one that has now for many years taken the foremost place—railway engineering. Later still we find the field of work of the engineer much increased by electricity and its applications.

It is important to remember that, as the engineer was at first a man skilled in working engines of war, the term civil engineering was used first, and should still be used, to embrace all engineering other than military. This is contrary to the general use which divides engineering into three groups—civil, mechanical, and electrical. Indeed we often find such subjects as surveying or sanitary engineering distinguished from civil engineering, which in this case means structural engineering.

Before enquiring, what kind of education an engineer should have, let us glance at the state of the profession before the founding of the institution of civil engineers.

We find that engineering has been practised from the earliest times, and, as Herbert Spencer has pointed out, the members of the clerical profession were first skilled in it; for at first we had only one educated class, the clerical. And so we find that the priests of Egypt led the way, followed in later times by the Roman Pontifex, the chief of the priests and the bridge-builder, and then in the middle ages came the builders of the great cathedrals.

In Egypt we find some notable examples of engineering work, principally in hydraulics. About 1385 B.C. Lake Mœris was completed. This lake is said to have been 450 miles in circumference and to have attained a maximum depth of 300 feet. The object in excavating it was to regulate the flow of the Nile, which previously had caused much damage by its floods. For six months in the year the Nile flowed by a great canal into the lake and then for the remainder of the year at low-water Lake Mœris flowed into the Nile. The canal, which was thus one of the earliest works in the regulation of rivers and irrigation, may still be seen. The Pyramids, whether merely tombs or astronomical observatories, as the late Mr. Proctor so ingeniously urged, are at least lasting

monuments of the great skill of the Egyptians in transporting material and in masonry construction. The largest of these puzzling structures contains about 82,000,000 cubic feet of masonry and weighs over 6,000,000 tons.

In Egypt we also find a fine example cf municipal engineering belonging, however, to a much later date than the works just mentioned. Alexander the Great employed Dinocrates as engineer to lay out the city of Alexandria. This city, with its population of 600,000, had all the advantages of its splendid situation, and Dinocrates also constructed important harbour works. The streets of the city were laid out at right angles to each other and there was an admirable water supply. Each dwelling had a reservoir supplied with Nile water, and these reservoirs and their supply pipes being lined with cement may be seen in many places at the present day.

China, that country of which we know so little, can show many engineering works of great antiquity. We have all heard of the Great Wall, begun by Che-Hwang te in 214 B.C., and the Grand Canal in the north-east over 700 miles long. In China also is the Sangan bridge, the longest in the world, 5¼ miles long and having 300 piers. This bridge may certainly be called a permanent structure, as it has been in existence over 800 years. In the mechanical branches of engineering also China was early at work. Printing was invented in 593, and was thus known 900 years before the time of Caxton.

But ancient engineering was at its zenith during the Roman Empire. Begun in the earlier years of the Republic the public works were ever increasing in magnitude; and, if they had only been required to withstand the effects of time only, we should have many more examples of beautiful masonry construction. As it is, however, we can see how thoroughly skilled the Roman engineers were in bridge building and masonry of all kinds, hydraulic engineering, road-making, sanitary engineering, and surveying. The permanency of their work is shown by the proposal to utilize some of the piers of Trajan's Bridge over the Danube in a new bridge to be built at the same place. This bridge was built 120 A.D. and consisted of 20 semi-circular arches, the span of each being 180 feet. The dome of the Pantheon, 142 feet in diameter, now nearly 2,000 years old, is often cited as an instance of the suitability of concrete for such structures. The Colliseum, covering an area of over 6 acres and capable of seating 70,000 persons, shows the greatest skill in the design of every detail with elaborate water supply and sanitary arrangements. It would take too much time to describe the numerous magnificent bridges constructed by the Roman engineers. Their waterworks with aqueducts, settling-ponds, filter beds, flow-off chambers, and leaden service pipes, and their splendid public roads are examples worthy of careful study even now by all who have similar works to carry out. The great sewers and their connections are amongst the earliest sanitary works still in existence. But the most remarkable works are the two tunnels which drain the Alban Lake and Lake Fucino respectively, and one of which belongs to the earlier period. As all readers of Roman history will remember when, about 398 B.C., the Romans were beseiging Veia, the waters of the Alban Lake rose so high as to be a source of danger to Rome. After consulting Apollo through his Delphian Oracle the Romans learned that Veia would be taken if the waters of the lake were drawn off to the sea. Accordingly they set to work and within a year a tunnel was driven. This tunnel, 6,000 feet long, penetrated a mountain composed of the hardest lava. To expedite the work

shafts were sunk in many places along the line so that the work could be pushed forward at several places at the same time, just as in modern tunnelling. The height at which the water stood above the lake entrance must have been a serious difficulty. The construction of this so called *emissarium* displays a high standard of knowledge of the theory and practice of surveying and levelling as well as great skill in hydraulic engineering. The Fucino tunnel belonging to the later period was completed after ten years' work in 52 A.D.

After the fall of the Roman Empire we find for a long time very little done in engineering. Between 1370 and 1377, however, Barnabo Visconti constructed the magnificent Ponte di Trezzo over the Adda, having a span of 237 feet; this is the greatest arch ever built, Cabin John Bridge, Washington, span 220 feet, being next in size. No other important works were carried out except some of the great cathedrals by the clergy and some bridges by the Freemasons.

Toward the close of the seventeenth century engineering revived, and Hydraulic Engineering was energetically practised in reclaiming the flooded lands of Northern Italy; Galileo, Torricelli, and other famous philosophers and mathematicians assisted in developing the theory of hydraulics. At the same time in France Hydraulic Engineering was also studied, and Belidor wrote his "Architecture Hydraulique," which may be considered as one of the first text-books of Modern Engineering —Engineering which combines theory and practice. A copy of Belidor's famous work dated 1790 may be seen in the University library. Following Belidor's suggestion in 1720 was established the Institute of Bridges and Highways, which body had charge of all engineering work in France and also of the education of all those wishing to become engineers. In 1708 was born the first great French engineer, Perronet. Thirteen remarkable bridges were built according to his designs, some of which have probably never been surpassed in elegance of design, and they are the first examples of level bridges. Perronet was also the inventor of many mechanical contrivances, amongst which was a saw for cutting off the heads of piles under water.

In England the first piece of satisfactory work was carried out by Sir Hugh Myddleton, a goldsmith, who, in 1610, commenced the work of leading the New River to London. This work he successfully completed, and the New River still forms part of London's water supply. However, there was no engineering profession in England for many years, and, when it was determined to build a lighthouse on the Eddystone Reef, disastrous results followed on two occasions from employing men who had no training nor skill in the matter. Then, in 1756, Smeaton was chosen, and, as it turned out, the choice was a wise one. Born in 1724, Smeaton had received a good education at Leeds Grammar School, and was then apprenticed to a philosophical instrument maker. He took a deep interest in engineering works, read many papers before the Royal Society, and in 1754 made a tour of the low countries to inspect the canals. His lighthouse, as we know, was a great success and has only recently been taken down to be replaced by a higher one. In 1757 Telford, the first President of the Institution of Civil Engineers, was born. The son of an Eskdale shepherd, at fifteen years of age, he was apprenticed to a stonemason, and yet found time to study Latin, French, German, and English literature, and even to compose some verses. After successful work in London, he completed his first highway bridge in 1792, and was appointed Chief Engineer to the Ellesmere Canal

and afterwards to all the principal canals being constructed at that time in England. The King of Sweden consulted him on the construction of the Gotha Canal, and Telford superintended the work on it. Telford's fame, however, rests on his magnificent roads. He built 920 miles of roads in the Highlands of Scotland and also a system of roads through the Welsh Mountains, which included the beautiful Menai Suspension Bridge. His continental work also included the road from Brest to Warsaw, constructed for the Austrian Government.

Mention has been made of the revolution caused in the profession of engineering by the introduction of steam, and we must now take a glance at Watt and his many discoveries in steam engineering.

In 1757 Watt, then only twenty-one years old, was established in the University of Glasgow as scientific instrument maker. With Black, the Professor of Chemistry, and famous as the discoverer of latent heat, he often discussed the possibility of improving the steam engine as it then existed. Newcomen's engine, the forerunner of Watt's, was merely used as a pumping engine. In this engine the top of the cylinder was uncovered, the steam was admitted below the piston only, and was condensed in the cylinder by a jet of cold water. After nine years of thought and study on the nature of steam, Watt at last conceived the idea of the condenser, and this with many other improvements, such as packing for the piston, cover and stuffing-box for cylinder, admitting steam to both sides of the piston, and the steam jacket he patented in 1769. Other inventions of Watt with regard to the steam engine are methods for converting the reciprocating motion to a motion of rotation, expansive working, parallel motion for the piston rod, throttle valve, centrifugal governor, and indicator. In fact, the only important changes since Watt's time are three, namely: (1) The great beam has been abandoned; (2) adoption of high pressure; (3) compound expansion. In 1780 Watt took out a patent for a simple process now used over the whole civilized world—the method of copying letters by using damp paper and slightly glutinous ink.

The inventions of Watt thus paved the way for George Stevenson and the first steam railroad in 1825, and with the railroad the present era of engineering began.

Though engineering is an eminently practical profession, still it differs in a marked way from the other scientific profession, that of medicine, in depending most closely on mathematics and mathematical physics, and we shall see that a thorough theoretical knowledge is absolutely necessary for its successful practice. An engineer must be a scientist as well as a practical man, and, although in the foregoing sketch we find names of men who have attained to great eminence as engineers without having had a sound theoretical training, still it was owing to great natural ability that they were so successful, and in many of their great works practice which then was worthy of praise would now be rather worthy of blame. In a recent lecture delivered by Dr. Anderson he said that, "having seen the great advantages that have accrued from the employment of men of the highest scientific culture in carrying out the engineering works in continental Europe and in the United States of America, we must recognize the fact that the days are past when an engineer can acquit himself respectably by the aid of mother wit alone, or of certain constructive instincts which have been almost the only guide of engineers and manufacturers down to quite recent times." A practical man is one who is guided by his own experience, and so is one who in narrow limits is not likely to make serious

mistakes, but he always needs a precedent, and, if he departs from the beaten track, must do so tentatively. It is true that the enormous tubular bridge across the Menai Straits was constructed by the successful practical engineer, Robert Stephenson, but it was the result of many experiments, and, till completed, its builder was uncertain whether it would carry the necessary load or not, a proof of which remains to this day in the grooves left in the masonry for supporting chains if they should have been needed. And this bridge and its successors, the Conway and Victoria tubular bridges, though worthy monuments of Stephenson's skill and success as an early engineer, would be looked on as faulty and wasteful practice if executed now. And this is due entirely to the fact that at that time theory and practice were kept apart. The celebrated Navier had some time before lectured on the methods of determining stresses in such structures, but the practical men at that time in England had not the opportunities to learn the principles which would have enabled them to proportion the various parts of their bridges to the stresses which they had to bear. But theory and practice were soon to be firmly joined together, and we find that a small girder only seventy feet span, on the Great Northern Railway of Ireland over the River Cusher, was the first iron lattice girder in which all the parts were properly proportioned to bear the stresses which came on them. This bridge, designed by Barton, was immediately followed by the magnificent Boyne viaduct, whose central span is 267 feet, and which "must ever rank as a signal illustration of the successful application of abstract principles to a great work by men who were capable, not only of appreciating them, but of following their guidance in a practical manner."

It might at first sight seem that, owing to the many branches of engineering, it would be well to have special schools for each branch, and that a student having determined which branch he intended to follow should devote all his energies to that alone. Such, however, is not found expedient. Over specialization is bad. A man thoroughly equipped as a railroad engineer might find himself hopelessly crippled at some time for want of some knowledge of electrical engineering; and, in fact, we find in many cases successful engineers have attained their success in other branches of the profession than that in which they had started.

A man in these days to attain even ordinary success must be well equipped when he enters on the practice of his profession, otherwise he will have many years of hard work, and he will always look with regret on the time wasted in his earlier years. The successful engineer is one who combines the highest scientific knowledge with wide experience. This scientific knowledge can only be obtained in special schools, and it is the duty of the State to see that such schools are maintained in an efficient condition. It is true that such men as Smeaton, Watt, Brindley and the Stephensons were successful, and yet had not opportunities of attending Technical colleges, but the average student might well hesitate to compare his natural ability to theirs, and they were all hard students, and made use of all the opportunities of study they met.

(To be continued.)

THE GROWTH OF P.E. ISLAND EDUCATIONALLY.

By Inspector G. J. McCormac.

FOR two long centuries after its discovery, from 1479 to 1700, Prince Edward Island lay untenanted except by the aboriginal Indians and a stray European who may have acquired their language, or cultivated their frendship. It is, however, from the year 1715, or two years after the Treaty of Utrecht, that the Island may be regarded as a settled country. The first to settle in the colony were Acadians, and these subsisted by fishing and the cultivation of small patches of ground. Progress was slow, for in 1728 there were only sixty families on the Island; and in 1745, or thirty years after the settlement began, they did not exceed 150 families, or about 800 souls. A French officer who visited the Island in 1752 reckoned the whole population to be 1,354. The expulsion of the Acadians from Nova Scotia in 1355 tended greatly to increase the population of the Island, as many of the fugitives settled here. On the surrender of Prince Edward Island to the British three years later the number of inhabitants was over 6,000. Shortly after this a panic seemed to have seized the inhabitants; they dreaded a forcible expulsion like their brethren in Acadia; cultivation was abandoned, and many of the people went to the mainland as a place of greater safety. When William Patterson arrived in 1770 as the first Governor of Prince Edward Island as a separate province there were not more than 150 families. At the beginning of the present century the population was about 5,000. In Charlottetown there were only fifty families, or between 250 and 300 persons. It will be remarked that up to 1800, A.D., the population of the Island was very unsteady, and to a great degree was migratory. Consequently very little progress was made, and education received very little attention. In August, 1767, the Island was divided into townships or lots and granted to individuals having claims upon the British Government. Each township was to furnish a glebe lot of 100 acres for a clergyman and a lot of thirty acres for a schoolmaster. No schoolmaster, coming from England, was permitted to teach without a license from the Bishop of London; and it was assumed in his instructions that all Christians, save those connected with the Church of England, were heterodox. Some denominations were, indeed, tolerated, but, in conformity to the bigoted British policy of the times, Roman Catholics were not permitted to settle on the Island. In 1834 the Legislature petitioned the King to allow that body to appropriate to the support of education the clergy reserves and the school lands, as it was impossible to dispose of them according to the original intention. In the following year an Act was passed by the Legislature authorizing the sale of the lands and appropriating the monies arising from the sales for the purpose of promoting general education within the Island. In 1821 education began to receive some of the attention it deserved, and in that year an institution called the National School was opened in Charlottetown. In 1829 the Legislature passed a Bill for the establishment of a classical academy in Charlottetown, to be designated the "Central Academy," vesting the management in a patron and nine trustees. Two teachers were to be employed, each to receive a salary of £150 a year, and no religious test was to be permitted. In January, 1836, the Academy was

opened, the Rev. Charles Lloyd and Mr. Alex Brown being the first teachers. Mr. Lloyd soon retired, owing to ill-health, and was succeeded by Rev. James Waddell, of Truro, Nova Scotia. In 1843 provision was made for the employment of an additional teacher. The Academy henceforth was conducted with great vigor and success and grew into a very valuable educational institution.

An Act of the Parliament of 1830 authorized the appointment of a Board of Education of five persons. The Board was required to meet every three months. Shortly after the passing of this Act the appointments were made. According to the provisions of our present School Act the Board of Education consists of nine members, being composed of the members of the Executive Council, the Principal of Prince of Wales College and Normal School and the Chief Superintendent of Education for the Province. The Provincial Teachers' Association are endeavoring to secure direct representation on the Board. Such representation would facilitate a frequent interchange of views upon matters which the teachers as a body might desire to bring under the notice of the Executive, and would bring the members of the Government into more direct contact with the teaching force.

In 1837 the first official Inspector of Schools for the province was appointed in the person of Mr. John McNeill, formerly Chief Clerk of the House of Assembly. He held the situation of Inspector for ten years, during which time he effected much improvement. In 1837 there were 52 schools and 1,649 scholars. When Mr. McNeill vacated the position in 1847 there were about 125 schools and over 5,000 scholars. His first report was published in October, 1837, and gave a graphic description of the educational conditions of the country at that time. I will now quote some paragraphs from this report:

"Though various laws have been enacted from time to time by the Legislature of this Island for the regulation of schools, and considerable sums of money have been appropriated for their encouragement, I regret to have it to state from recent personal observations that the system of instruction pursued in many of the country schools throughout the Island is extremely defective and consequently but little really useful and substantial knowledge is acquired by the children attending them.

"This appears to me to arise from several causes, some of these perhaps unavoidable in a new country like this. In many of the settlements the inhabitants are poor, and, having to struggle with numerous difficulties in procuring the means of subsistence for their families, the education of their children is with them a matter of mere secondary consideration. And even when they do turn their attention to this important object they are not (generally speaking) very scrupulous in the selection of their teachers, satisfying themselves with the common idea that it is better to have any teacher than none at all.

"The little encouragement which is in most cases held out to teachers of character and qualifications and the precarious manner in which their salaries are paid operate most powerfully as a bar in the way of the advancement of education. Hence it too frequently happens that it is only persons of shipwrecked character and blasted prospects in life, after every other resource has failed them, who take up the important office of schoolmaster; and hence also the frequent changing of the teacher; the long lapse of time that takes place after the expiration of the engagement of the old before a new one is appointed; in

consequence of which the children nearly forget what they had previously acquired.

"The migratory character of the schools, or the shifting of them from place to place, has, in my opinion, another injurious effect upon the progress of education. From this cause it happens that after the children have made considerable proficiency their career is stopped all at once by the removal of the school to another part of the district, where the population has recently became more dense, and then the former locality is completely deserted, the settlers immediately around it being unable, without the co-operation of their more distant neighbors, to secure the continuance of the school.

"I must also mention another practice which is too prevalent in the country, and which I conceive to be exceedingly injurious to the respectability of the teacher in the eyes of the pupil, and consequently hurtful to his usefulness—that is, receiving his board by going from house to house; in which case he is regarded, both by parents and children, as little better than a common menial; and from the familiarity which must necessarily subsist between himself and the family he cannot exercise that authority over his pupils which is indispensably necessary for a teacher to maintain.

"At East Point (Kings County) is a school taught by a competent teacher, John Slattery, in which I met with the only Latin scholars taught in any school on the Island."

At this period the schools were supported by voluntary contributions, aided by partial assessments and Legislative grants.

In 1833 there was 74 schools and 2,176 scholars. In 1841 the schools numbered 121 and the scholars 4 356 By the report of 1851 the number of schools had increased to 135 with a total enrolment of 5,366. At this time there were three school inspectors, one for each county, viz.: John McNeill for Queen's County, John Arbuckle for Prince County, and John Ross for Kings County.

In October, 1853, John M. Starke was appointed visitor of schools for the whole Island. He was a graduate of Stowe's Normal School, Glasgow, Scotland. In 1856 there were in operation 268 schools, attended by 11,000 scholars. So the number of both schools and scholars had almost doubled during the six years, 1850-1856.

Governor Bonnerman, in opening the session of 1852, stated that he had much pleasure in visiting many parts of the Island, but that he observed with regret the educational deficiency which still existed.

An Act for the encouragement of education and to raise funds for that purpose, by imposing an additional assessment on land, was passed. This Act was called the Free Education Act and formed the basis of the present educational system of the province, which has conferred such a great blessing on the country.

On October 1st, 1856, a Normal School for the training of candidates for the teaching profession was opened at Charlottetown by Governor Daby in presence of a large assemblage. Several interesting addresses were delivered. Inspector Starke's remarks in reference to moral instruction in schools gave rise to a great agitation on the propriety of Biblical instruction in the schools, and resulted in his early resignation of the office of Inspector of Schools. The Bible question was brought before the Legislature during the sessions of 1857 and 1858 by numerously signed petitions asking that the use of the Bible in all the Public Schools be authorized by law. The prayer of the petitioners was rejected by the House of Assembly on both occasions.

During the session of 1860 several

Acts were passed relating to education. One provided for an additional teacher in the Normal School; another declared the introduction of the Bible into the Public Schools to be legally authorized, while another provided for the establishment of the Prince of Wales College. In 1879 the College was amalgamated with the Provincial Normal School. All the Public School teachers receive their education here The curriculum includes Latin, Greek, French, English Language and Literature, Mathematics, Physics, Chemistry, Agriculture and Agricultural Chemistry, Natural History, Ancient and Modern History, Bookkeeping and the principles and practices of teaching. This institution has an excellent staff of teachers under the principalship of Alex. Anderson, LL.D., a thorough disciplinarian and a teacher of much ability. A new college building is being erected and will be completed next fall (1899). Last session there were 233 students attending old Prince of Wales College.

On December 13th, 1859, there died a man who always took a deep interest in promoting education, the Right Rev. B. D. McDonald. He established many district schools, also a convent where young ladies receive a superior education. In 1855 he opened St. Dunstan's College, now one of our leading educational institutions, and the only one in the province which confers degrees. It is affiliated with Laval University.

In 1863 some changes were made in the Education Act, the reduction of the teachers' pay from the treasury by £15 and the introduction of the Grammar Schools. The fifteen pounds deducted from the teachers' treasury allowance was required, by the amended Act, to be made up by each school district, and the amount had to be guaranteed by the school trustees to the teacher in a written agreement in order to enable him to receive his treasury allowance, so that according to the new law every school district that would not raise at least fifteen pounds for the teacher was to get no aid for its school from the treasury. But this arrangement proved unpopular and had to be abandoned in 1867 and the whole of the teachers' salary made payable from the Provincial treasury.

In 1877 a new School Law was passed which dealt successfully with the delicate and difficult problem of our school question. This law is now admitted by all classes and creeds to be well adapted to the wants of a mixed community like ours. The success of the new School Law is very clearly shown by the fact that within the first eighteen months of its operation the attendance of pupils at the Public Schools increased by over five thousand. West Kent Street School, Charlottetown, the Summerside, Georgetown, and other important schoolhouses were erected about this time.

The following extract from Superintendent Manning's report for 1878 shows that at the advent of our present school system there was vast room for improvement in the teaching profession: "Foremost among the hindrances to the progress of education on this Island is the large number of farmer-teachers employed and the irregularity of attendance; and when, as is often the case, these occur in the same district, the result is disastrous to the school. A moderate amount of muscular exertion should operate only to improve a teacher's efficiency, but it can be easily seen that the service suffers in the case of one farming on such a scale as to require a $160 mowing machine, while his school is graded second rank by the County Inspector. Another dragging his weary limbs into the schoolroom half an hour late is so little interested in the studies of ten or twelve youngsters

that he soon drops off in a doze! Trustees have more than once descibed these farmer-teachers as 'just going into school to rest themselves.' This is a matter which only the people can remedy by refusing to employ this unprofitable class of schoolmasters."

In 1880 was introduced a system of classification of Graded Schools based on merit alone. Up to this year first-class schools were established by a vote of the Board of Education and retained their rank without any regard to efficiency. They are now raised to that rank whenever they reach the standard fixed by the Chief Superintendent of Education. This step has made these schools centres of educational activity. Those of them that ceased to be such were dropped from the list of first-class schools and assigned an inferior rank until by merit they again won the position lost.

The Provincial Teachers' Association was instituted in 1880. It was incorporated by Act of Parliament in 1896. This Association is in a very progressive and prosperous condition. It meets once a year.

In 1881 a general "Course of Studies" for the grading of the Public Schools was adopted. In the same year a general system of entrance examinations to the Prince of Wales College and Normal School was established. These examinations are under the control and direction of the Chief Superintendent of Education.

In the following year several important amendments were made to the Public Schools' Act which greatly increased its efficiency. In 1883 the study of Agricultural Chemistry was introduced into the schools of the Island, and two years later an Arbor Day was established for the schools.

In 1861 a census was taken and the schoolhouses were found to number 302, the teachers 280. In 1870 the total number of schools was 372 and scholars 15,000. In 1874 the number of schools was 403, of scholars 18,233. The salaries of teachers then ranged from $113.56 to $324.44 In 1878 there were 465 schools, 413 teachers and 19,240 scholars. In 1881 there were 486 schools, 463 teachers and 21,601 pupils. In 1887 there were 437 schools, 505 teachers employed, and 22,460 pupils. To-day we have 467 schools, employing 579 teachers and having an enrolment of 21,845 pupils. The salaries paid teachers range from $130 to $783.

Our schools to day are in a healthy and flourishing condition; they are no longer held down by brute force or taught incompetently or irrationally. The teachers of this province are alert and active as a body and do their duties faithfully. The C.P.R. express is no farther ahead of the lumbering stage coach than the P.E.I. school of to-day is ahead of the school of twenty years ago. The moral, social, intellectual, and industrial circumstances of the people have all changed. The old log schoolhouse is a thing of the past, and our school buildings, with very few exceptions, are very comfortable, well furnished, and well lighted.

To live content with small means; to seek elegance rather than luxury, and refinement rather than fashion; to be worthy, not respectable, and wealthy, not rich; to study hard, think quickly, talk gently, act frankly; to listen to stars and birds, babes and sages, with open heart; to bear all cheerfully, do all bravely, await occasions, hurry never; in a word, to let the spiritual, unbidden and unconscious, grow up through the common. This is to be my symphony.

CONCERNING GIRLS.

Manners Versus Learning.

In the last century, education was looked at from a standpoint very different from what it is now. Ignorance was not considered a disgrace, and to be uncertain in his spelling was no bar to being a gentleman. In the education of the girls especially, books seem to have borne a very small part, Dean Swift declaring, in his usual dogmatic way, that "not one gentleman's daughter in a thousand can read or understand her own natural tongue." Certainly in his generation, needlework and deportment were the chief things taught them. Dignity of manners was judged to be of more importance than book-learning; but as women are more adaptable than men, more capable of catching the prevailing tone of thought, they could hold their own in society in spite of their ignorance, as long as they were finely mannered and not hoydenish. Grace of carriage, therefore, good breeding to make home peaceful and pleasant, piety to rule her private conduct, formed the ideal of perfection in woman. Thoroughness or exactness of knowledge was not thought compatible with these good qualities, and learned ladies were dreaded accordingly. The *Spectator* tells that "a lady at court having accidentally made use of a hard word in a proper place and pronounced it right, the whole assembly was out of countenance for her"; showing how a woman who knew more than others of her sex was regarded, if she "had dared to read and dared to say she read." Dancing, being the only physical exercise then allowed to girls, was much prized, both as a healthful exertion and a training in elegance and grace; and the dances of the period were nearly all in very stately measure. Most of us middle-aged people must still remember a few old-lady friends whose beautiful, attractive presence and gracious manner were at once the dread and admiration of our childhood.

In the present day, things are much changed. The girl's education is as thorough as the boy's. No smattering of knowledge now contents us for them, but examinations as stiff and exhaustive are given to them as to their brothers, and with as good results. Along with this high mental discipline, the physical training goes hand in hand; so that with boating, swimming, calisthenics, cricket, lawn-tennis, the physique of this and future generations should go on improving at a rapid rate. The idea that a beautiful girl must be pale and delicate-looking, and that, to be interesting, she must be ready to faint at the least exertion or motion, like the heroines in the old novels, is now quite exploded.

But, in gaining all this mental and physical excellence, care must be taken that we are not losing the well-bred courtesy that used to sit so gracefully on our grandmothers, or the loss will be greater than the gain. In avoiding the ignorance of the past, there is the danger of going to the other extreme, of making learning of too much importance, or rather of making it all-important, forgetting that for the proper application of it other faculties are required; that a girl crammed with knowledge is only like a bookcase full of books, unless she has the power to use it for good and to give pleasure to herself and others. And what will give her this power? Only a proper training in which good manners or good breeding, as the essayists of the last century were fond of calling it, holds its proper place; and a greater injustice is done to a girl in leaving this part of her education incomplete

than if her book-learning should not be exact and precise. It is only in childhood that this can really be acquired, that the easy, courteous demeanor can grow to be second nature; and it is then also that the brusque boyish manner, so much to be deprecated, is formed.

The discipline to be undergone for this part of her education is also a great gain to the child, as great almost as the result, keeping in proper check, as it does, many propensities fostered by the emulation in the schools, and strengthening very opposite qualities. The one training places self in the foremost place, fosters self-will, want of reverence, boldness, independence of character; all of which may not be evil qualities, but would be greatly improved by being controlled by the courtesy and graciousness of manner, which, while perfectly self possessed, is thoughtful for others, full of deference for the old, and purely womanly in type. There is no true reason why an advance in learning should mean a decay in manners; the opposite ought to be the case; a true enlightenment ought to mean culture, and culture—refinement both in thought and observance.

Woman in the past ha been the helper and consoler of man, and though other paths in life may now be opening to her, making marriage not so imperative, yet her real place and chief purpose is to be his *alter ego* and helpmate. Woman's influence is the most powerful of the great forces that affect men. It pervades everything. It is calming, soothing, elevating and stimulating. While aiding men to do their duty, it makes them content in doing it, and keeps alive in them the love of social intercourse. To have this influence in the future, as she has had in the past, woman needs all the intellectual improvement she is at present gaining; but added to it she requires the grace and good breeding of the olden time to make her a woman of high culture and noble aspiration, yet of loving womanly sweetness. It as often happens that such a one can uplift a husband to the dignity of her own character, as that a husband can uplift a wife to his own rank.

The tendency of the times has been to raise women more and more to an intellectual equality with man, and with this growth the sentiment has risen in their minds that the conventions of the world are against their complete development; that the rules of society have been formed for the comfort of the man without regard to the good of the woman; thus generating in many a feeling of rebellion against a few of those existing customs. As woman's ambition has been roused by her new position, and her faculties awakened, a number of the sisterhood have protested against the old time notion that she ought to steal through life unheard and unremarked—that it is a reproach for her to be talked of; and these, rushing to the other extreme, have been led to court notoriety, to despise conventionalities and to adopt a hostile manner towards the other sex, while assuming a brusque demeanor that is not at all pleasing or attractive. As some writers have striven to set class against class, others lately have been trying to array sex against sex. Nothing could be more absurd. However close the relation between sisters, between mother and daughter, or between any two women, it can never be so strong as between husband and wife; and the tie between father and daughter, mother and son, or brother and sister, is usually the more binding because of the difference of sex.

Educating the one sex, without any consideration of a probable affinity to the other, is therefore not advisable, still less the setting of them up in opposition. But, as time goes on, the

antagonism on the man's part towards learned ladies, as well as the bitterness on the woman's side for her treatment in the past, is dying out. It is in the woman's power to decide if her kingdom is still to exist—if man is to be after all under her sway, as of old—if she means to fight the battle of life by his side, or as his rival. Her cultivated, bright intelligence will have to be put forth, not to lift her up above her every-day employments, but to throw a grace over her common acts, and to make her a centre of holy influences and innocent cheerfulness. —*Chambers' Journal.*

THE ENGLISH ALPHABET AS IT OUGHT TO BE TAUGHT.

BY INSPECTOR J. COYLE BROWN, PETERBORO, ONT.

Symbol	Name.	Keyword to Name.	Symbol	Name	Keyword to Name.
a	a	aim	v	ve	venial
b	be	being	w	woo	wooing
c	ke	kedron	x	ex	exit
c	se	cedar	y	yi	
d	de	deist	z	ze	zenith
e	e	eat	oo	oo	ooze
f	ef	effort	au	au	author
g	ge	geese	aw	aw	awful
g	je	genius	ou	ou	outer
h	he	hero	ow	ow	owlet
i	i	ice	oi	oi	oil
j	ja	Jacob	oy	oy	oyster
k	ka	Kali	ch	che	cheese
l	el	elbow	ph	fe	phenix
m	em	emmet	qu	kwe	queen
n	en	enter	sh	she	shear
o	o	open	th	the	theme
p	pe	period	th	the	these
q	ku	curious	wh	kwe	wheel
r	ar	arrow	ck	ek	beck
s	es	essay	gh	af	laugh
t	te	tea	ng	eng	length
u	u	use	tch	etch	fetch

THEORETIC OBJECTIONS AND REMARKS.

1. No names indicative of their sounds are given to the single vowels, *a, e, i, o, u*, when they are short. It is contrary to the genius of the English language to use the short sounds of most of these in a detached way, and on the whole no advantage is gained by attempting it.

2. *C, g* and *th* have each two names. There is no way of overcoming this, without changing the form of the characters, and this is not desirable.

3. *Au* and *aw* have the same name; so have *ou* and *ow*; so, also, have *oi* and *oy*. This occasions no difficulty either in pronouncing words or in oral spelling.

What can't be cured must be endured.

4. *Ch* (che) and *tch* (etch) have the same function; so have *f* (ef), *gh* (af) and *ph* (fe); so, also, have *c* (ke), *k* (ka), *q* (ku) and *ck* (ek). This is a drawback in teaching, but not a great one. It cannot be avoided without changing the appearance of the written and printed page.

5. Many of the symbols have irregular uses; for example, *oo* is sometimes short, as in foot; sometimes like *o* long, as in door: and sometimes like *u* short, as in flood; *ch* (che) is often like *c* (ke), as in chasm; and sometimes like *sh* (she) as in chaise. When the regular uses of the symbols are thoroughly established in the mind of the learner, the irregularities are mastered with comparative ease.

The names are better to learn with than the attempted phones. They can be more rapidly applied. They can be given with any required degree of audibility, they never have to be changed, being adapted to the needs of the cultured literary man as well as to those of the little child. They distinguish between *ch, tch, f, gh, ph, c, k, q* and *ck*, which the phones cannot do.

(Ch, tch, f, gh, ph, c, k, q and ck.)

ADVANTAGE OF PROPOSED CHANGE.

It will lessen the time of learning to read by one-half.

It will lessen the teacher's labor by more than one-half.

It will enable many subjects to be *learned* that hitherto had to be *taught*.

It will enable a foreigner to acquire a knowledge of the language in a much shorter time.

It will do much to make learners acquainted with the regularities and irregularities of the language, and thus lead to many absurdities in spelling being dropped.

It will do more than any other pedagogic movement to make the English language the language of the world.

De Massa to de shepa'd say :
" Go call de sheep dat's gone astray.
De night is col', I hear de win'
A-shakin' gin my winder blin' :
Dar's some po' sheep dat's gone astray.
Go call 'em in, Cu-dey ! Cu-dey !
Cu-dey ! Cu-dey ! Cu-dey ! "

An' all night long de win' an' rains,
An' hail against de winder panes,
In dreams I hyar de massa call
De wanderin' sheep, he knows 'em all.
He pints de road, an' shows de way
An' ever stan's an' calls, " Cu-dey !
Cu-dey ! Cu-dey ! Cu-dey ! Cu-dey !
Cu-dey ! Cu-dey ! Cu-dey ! " —*Ben. King*

EDITORIAL NOTES.

Deliver not the tasks of might
To weakness, neither hide the ray
From those, not blind, who wait for day,
Tho' sitting girt with doubtful light.

" That from Discussion's lips may fall
With Life, that working strongly, binds—
Set in all lights by many minds,
So close the interests of all."

The standard for admission to the High Schools and Collegiate Institutes is fixed by law at the upper limit of the Fourth Book class in the Public School. After passing this fixed standard of work, if the pupil still continues in the Public School, should fees be charged? Fifth Book classes are supposed to be more advanced in school work than the standard for admission to a High School, in which class of schools fees are usually charged. Several reasons can be given for this change in the treatment of the school question : To lessen the burden of the tax-payer and to indicate that the High School is not a State necessity, while the Public School course is considered such. The great majority of the pupils in the Public Schools never reach the Fifth Book class, although we think that all should accomplish the school work required in order to pass the standard for entrance to a High School. But the fact is otherwise, by far the greater number of scholars in the Public Schools never reach even the Fourth Book class.

It is this part of the school programme, it seems to us, that the Public School authorities should seriously consider, viz., the part from the beginning of the school work to the end of what is required to complete the work prescribed for the Fourth Book classes. Trustees, teachers and inspectors should with utmost care and diligence devote their energies to the proper and efficient educating of all children in their schools, at least to the end of

the programme of school work for Fourth Book classes. Nearly all their scholars complete their school life at this point.

Still, however, the question remains, if the pupils do continue in school for school work in Fifth Book classes should fees be charged? Most people will say, we fancy, yes. And some will say no, until the pupil has passed the Public School Leaving Examination. No one will advocate, however, that pupils who remain at the Public Schools till they pass the first part of the Junior Matriculation Examination should be taught at the expense of the public. Justice demands that if this be done at the Public Schools it should also be done at the University. If supplies are furnished for pupils who attain this standard at the Public Schools they should also be furnished for students at the University. Many young men and young women have to provide their own fees, and pay for their books and writing paper, who would be grateful if a generous though unwise public would pay their expenses at College and University. The question now arises, will this be a good investment for the public taxpayer? In one case out of a thousand it might be. In the case of the nine hundred and ninety-nine, it would not be profitable for the public, nor advantageous for the pupil. It is the teaching of experience that labor is profitable for all things. There is a satisfactory way of dealing with this difficult question which we will not take time to discuss at present.

For these and other reasons, we conclude that fees should be paid by those who are in the Fifth Book classes in the Public Schools. The fee might be small, say twenty-five cents a month. In the case of supplies being furnished the fee might be fifty cents a month. We fail to see why gratuitous schooling should be given to those who are fit to pass the Entrance Examination to the High School, if they stay in a Public School, while the same pupils, if they enter a High School, generally have to pay.

THE CANADA EDUCATIONAL MONTHLY has day in day out advocated for the highest possible attainments in education. We rejoice in power and conspicuous ability. But we advocated earnestly and constantly to educate the character rather than the memory, and the heart rather than the intellect. Let the future generation know how to read and write, to manufacture and trade in the best possible way; but, let us feel more and more that people gain in self-knowledge, self-control, and self-respect. The moral element in a people is the leading part. If we fail in nourishing this in the life of our people, our failure is complete. We are exceedingly glad to see that the people are being called upon to reason on this vital question by the organs of the different churches. We print an extract this month from *The Evangelical Churchman*, which is a sample of what is to be found in many. And we are glad to see the general press of the country is also giving efficient help in this very important discussion. We may, without offence, be allowed to name some of those papers which have come under our notice: *The Mail and Empire*, *The Montreal Gazette*, *The Montreal Witness*, *The Quebec Chronicle*, and *The Toronto Globe*. No doubt there are other papers, but those above mentioned have come to our notice as giving special attention to this all-important question. The Bible must be recognized in many ways in our Public School programme; its spirit of spirituality must be acknowledged and pervade all our schools.

The country, state, or province that claims superiority for its system of education and yet neglects the sus-

taining of efficient training schools for its teachers is simply acting the part of an idle boaster or hypocrite. That the teacher makes the school is a principle, perhaps, not wide enough to include every element of school-work, but it is a fairly practical principle that may be adopted by a school board when selecting teachers, and an excellent guide to the government that has the cause of education at heart. Nearly all of our Canadian provinces had it in view when they inaugurated a system of public instruction, with the exception, perhaps, of British Columbia, where there exists no Normal School up to the present time. That there should be a Normal School in Victoria or Vancouver the people of British Columbia have no hesitation in saying when they join our educational gatherings to the eastward; and at one time the Hon. Colonel Baker, a former Minister of Education of that province, seemed to be on the eve of organizing such an institution. The institution, however, has not yet been organized, and possibly may not be organized until the passion of politics comes to take up the question, with partyism on both sides of the street. Many of the teachers and school inspectors of the great western province have had their learning in the other provinces of the Dominion, the Superintendent of Education, Dr. Pope himself, also hailing from the East. From his experience gained there he has been able to add to the improvements of the system he has been called upon to supervise, and we are assured that his sympathies are all in favor of "beginning at the right end" as soon as possible.

It would be absurd for us to advance reasons in favor of a Normal School training at this late date, even should any benighted Westerner wish to have them repeated for the thousandth time as an encouragement to the Local Government at present in charge of the affairs of his province, if not to all our local governments. And yet he may be surprised to learn that the training of teachers has not yet been introduced or developed as far as it should go in many countries that claim to possess the "best educational system in the world." Only in one or two of the Canadian provinces and in but few of the States has the Normal School training of the college graduate received the attention it ought to receive, and even yet the idea lingers amongst us that a young man is fitted to teach if he has graduated at any of our universities. In Ontario the well-organized School of Pedagogy established at Hamilton, and now under the able superintendency of Dr. McLellan, has removed the reproach from that Province that a Normal School training might with safety stop at the elementary school. An effort is also being made to establish a professorship of education in connection with McGill University, but beyond these movements little or nothing has been done to give the College graduate a special training to fit him to take charge of advanced classes in an Academy or High School. This fact, however, should not deter the people of British Columbia from making immediate provision for the maintenance of a well-equipped Normal School for the training of teachers for their schools.

Pestalozzi left this as a legacy to the world, that the teacher should be specially trained. David Storne, the founder of the first Normal School in the world, accepted the legacy as a challenge, and worked out the principle to a success in Glasgow. When Horace Mann began to improve the school system of Massachusetts, he soon found that the great defect in the system was not the indifference of the parents or the communities, but the ignorance of the teachers and their

wretched methods of running a school; and on this account became at once the great pleader in behalf of training schools for teachers.

Dr. Ryerson began his great life's work with the organizing of a Normal School, and so did Dr. Forrester, of Nova Scotia; and when Sir Louis Davies determined to improve the schools of his native Province, Prince Edward Island, by taking advantage of his premiership in passing the Education Act of 1877, he took pains to provide for the organization of a proper Normal School. New Brunswick and Nova Scotia have their Normal Schools, the one at Fredericton and the other at Truro. Quebec has four Normal Schools; Ontario three, with another in process of building; Manitoba one, and the Canadian North-West one. Canada has, therefore, no reason to be ashamed of her enterprise in this direction, and, when opportunity arises, we may, later on, look into the organization of the above institutions, to see wherein they differ, and how far their work may be further assimilated.

In this connection we may say that we are glad to learn that the Government of Prince Edward Island has completed arrangements for the construction of a new building for the Prince of Wales College and Normal School. This has not been accomplished without much discussion, lasting as it has for nearly twenty years. The Provincial Normal, School as organized under the Davies Administration in 1877, had a separate existence, with the departments of one of the city schools for practising schools, but in a few years, under a succeeding government, the spirit of economy brought about the amalgamation of the institution with the Prince of Wales College. Considering the lack of suitable accommodation for such amalgamation the movement was looked upon by many as a retrograde step, and the subsequent history of the training school has by no means discounted that opinion. The Hon. Mr. Farquharson has at last taken the matter in hand, and a new building will soon be opened under brighter opportunities for the training department, which, it is thought, will be reorganized in such a way as to provide the schools of the Province with a requisite number of properly trained teachers. If such a re-organization does take place there will be no need to further lament about the retrograde step taken in 1880, since the principle that the teacher makes the school will again have fair play in the tight little island Province in the east.

The ethical problem we incidentally referred to last month in our notes of the late Montreal Cenvention is being further discussed as a "sore point" in the newspapers, and Major Hewton, of Richmond, one of the most zealous and outspoken of Quebec educationists, is again likely to find out what a task it is to convince an antagonist whose logic finds its present and only strength in the gainsaying of a majority. The man who thinks that a majority vote can always make a measure or motion right or wrong, or any line of conduct justifiable or unjustifiable, may be for the time a very dangerous antagonist, but he is none the less the wishy-washiest of logicians. Anytus and Meletus could circulate the rumor against Socrates that he was an atheist and everything that was bad, and get a majority of Athenian judges to condemn him to drink the hemlock; but the soul of things is just, and even Dr. Kneeland, of McGill Normal School, must come to see this in time, and prefer to gain more and more the reputation of a Socrates than of an Anytus and Meletus. Major Hewton may also take assurance from

the fact that if the Anytuses and Meletuses are after him their unpopularity-breeding phrases against a publicist of his standing must come to naught in the end. But for the temporarily unpopular man the world would have made but little advance, and though unpopularity may not be a paying game for the moment it is always a paying game in the end when honesty comes to be practised as the highest and best policy.

There is one phase of the discussions in connection with the above that we cannot but condemn, and that is the accusation, indirect as it may be claimed to be, that the reporter of the doings of the convention was anybody but the reporter himself duly accredited by the newspaper he represents. Dr. Kneeland's punishment at the hands of *The St. John's News* reporter is well deserved, and the fun it is likely to provoke whenever spoken of, may deter others from committing the offence—the gross impertinence we might say—of accusing any one of writing anything that appears in a public newspaper or periodical under the editor's authority. The impersonality of the press is one of the greatest literary safeguards of the times; and when a man, biassed by the wish, which is father to the thought, circulates the hurtful hint that so-and so wrote such-and-such an article, for which the editor or reporter is alone responsible, he is guilty of an indiscretion, and when his accusation comes to be put in black and white, and is shown to be false, nothing but an apology from the offender should follow. We write thus emphatically on this subject, seeing we have received communications containing impertinences of the above nature—accusations against certain prominent educationists for writing editorials for us, which they could never possibly have seen unless after the monthly issue of our journal had been printed.

The Royal Victoria College, Montreal, is expected to be opened soon, if arrangements can be completed for its organization during the visit of Lord Strathcona to Canada. The building, which stands on the north side of Sherbrooke street, with the statue of the Queen in front, is one of the most spacious in the city, and has been erected solely at the charge of Lord Strathcona, the generous Chancellor of McGill University, who intends also to endow it before the governors of the university assume control. The building will be exclusively set apart for the lady students of the Donalda Course, being supplied with suitable boarding apartments and spacious teaching halls, with all the latest improvements connected with home and college life. What the new organization will be it is impossible to say at this early date, but in all likelihood the college will be placed in the hands of a Dean, who will have charge of the institution, subject to the corporation, as are the other faculties. A staff of professors will be appointed to assist the professors of the Faculty of Arts in the various departments, but whether these new professors will be brought from Great Britain or be Canadian trained can only come up for serious consideration as soon as the intentions of the donor are made known. There is no doubt that the Royal Victoria is sure to become in time one of the best equipped and most efficient ladies' colleges on this side of the Atlantic, and we congratulate Montreal on the prospect.

The correspondence system of tuition has not found its way into Canada to the extent it has into other countries, and this is easily explained by the fact that our colleges have not

opened their undergraduate courses to extra-mural students, unless, as in the case of Queen's University, Kingston, only to a limited extent. The argument in favor of the system may be put, as Mr Jennings puts it in a communication to *The Australian Schoolmaster*. The mediæval system of giving oral instruction is still essential for the education of young children, but persons who have reached the sixth standard in the State schools, or the sub matriculation class in a private school, may enter on any pursuit by way of earning a livelihood, and, without neglecting the business of the moment, prepare for higher or more congenial pursuits, if more devoted to Minerva than to Mercury. Everything that could be *said* by way of explanation may be *written;* and written explanations have one very obvious advantage—they may be kept till they are fully and adequately mastered. A spoken explanation may be but half comprehended and soon forgotten; but *litera scripta manet.* In country places there are few amusements for winter evenings that are not injurious; the study of some subject, under expert guidance, gives perennial joy, and is a less expensive amusement than possibly any other.

A telegraphic despatch was lately sent from England to India in which it was stated that "Mr. Wren, the celebrated crammer," was dead, and a contemporary holds up his hands at the phraseology of the message, and exclaims—what a reputation to have—to be known to the world and handed down to posterity as "the celebrated crammer." What Canadian teacher, we may say on our own part, would care to have such a phrase written on his tombstone, even if it be only the idle spoken phrase of a newspaper reporter? That is only an idle spoken expression, one who knew Mr. Wren and his life-work declares, when he says: "Knowing what we do of the character of the man, we can imagine his ghost chuckling, if not glorying, in a title which is an unbounded libel on his life-work. The men who went to Mr. Wren were already largely educated, and in most cases had the necessary information at their disposal. It was Mr. Wren's function to teach them how to make the very best use of their information and brains, and because he succeeded to an extraordinary extent by his ability, his energy, his insight into character, by his ready grasp of the strong and weak points of his pupils, and by his system of competent teachers and small classes, he is to be everlastingly and opprobriously dubbed 'the celebrated crammer.' The fact is Mr. Wren was a born teacher, and was as far removed from the real crammer as the north pole is from the south. Undoubtedly there is such a thing as 'cramming.' The genuine article may be found in India, where its manufacture is fostered by a multiplicity of subjects and of examinations which in too many cases, alas! put a premium on the accumulation and the merely mnemonical knowledge of heavy, ill-digested facts. But it is an abuse of terms to apply the offensive word 'cramming' to a system, such as that practised by the late Mr. Wren, where thoroughness went hand in hand with rapidity, where principles were explained, no difficulties slurred, important points emphasized, and where the utmost application and concentration were demanded."

Where this thing is going to end we do not know, but we can hardly think that it will end with benefit to our schools or the children attending them. Perhaps there is no truth in the report, but if there be it will hardly pass without discussion, and the sooner the discussion begins the better it will be for our boys. We give the paragraph for what it is worth.

The public school board has accepted the invitation of Hon. W. D. Bloxham, governor of Florida, to send a drill company of fifty public school boys to visit Tampa, Florida, in February, 1899, when similar companies of boys from various states of the union will also be in Tampa. The railways have made special arrangements for the occasion so that the expense will be slight. Members of the board were of the opinion that it would be more patriotic to send the boys to the historical scenes of Quebec, or to Lundy's Lane, but on the whole it was thought that the Florida trip would do more towards fostering the friendliness between the United States and Canada, besides giving a desirable advertisement to Canada.

The reputed breakdown of the compulsory idea is a surprise to its numerous advocates in Canada, and, while the school authorities of the city of London, England, are considering possible remedies, those who favor the enforcing of compulsory attendance in our Canadian schools may be inclined to review their arguments in face of the facts as they are thus stated. Every time the London Elementary Schools are open there are absent 145,000 of the 754,000 children enrolled, or, roughly, one out of every five. Many of these children are kept away from school by sickness and other reasonable causes; but the statistics of attendance show that a very large proportion of the absentees are practically always away from school, and that their absence is wholly owing to the indifference or cupidity of the parents. It is the same children who are constantly absent from school. They cannot be always suffering from illness, and, as a matter of fact, they may be found any day playing about the street corners or discharging the duties of what is called "a little place." The parents are summoned from time to time before attendance committees, and even before the magistrates; but there is little practical improvement in the attendance of the children, and the same parents are found neglecting their duty over and over again. In short, our compulsory laws are compulsory in name only. Parents ignore them and defy them.

The possibility of making the Common School a place where children may be trained to run a farm or cook a meal is an idea which bothers our philanthropists every now and again, and brings them to the front as would-be educationists. This time it is the Countess of Warwick who says that there is a fateful tendency on the part of the sons and daughters of small farmers to gravitate towards the town, where wages are higher, where life is more varied, and the chance of competency greater than in the country. So year by year the rural districts lose a certain proportion of their youth, and it is always the best who go—the strongest, the "brainiest," and the most enterprising—while to the inferior stock is left the task of replenishing the nation's granaries. Thus the problem is: How to keep the clever ones on the farm, and give them and the others the necessary weapons for grappling with the problems of agricultural economy. We want to make the next generation of farmers' sons and daughters a little more nearly abreast of the times; we want to enable them to look at their business from many points of view instead of from one—that, namely, of their great-grandfathers; in a word, we want to imbue them with the spirit of wise experimenting. Now it is of little use to try to alter the set convictions of grown men. They have been moulded into a groove from which even the stern teachings of necessity will not make them budge. But our hope lies with the farmers' young sons and daughters.

I say daughters, because we must be just as "keen" on the fitting education of country girls as on that of country boys, and this is purely a question of education.

The argument of the generous-hearted countess is heard often enough in Canada these days, but only as coming from those who have never considered carefully what the true function of the Common School or Grammar School really is. The man or woman who wants agriculture and carpentering and shorthand and type-writing and cooking and bed-making taught in our schools has never distinguished between the school-training that becomes an abuse of the child's faculties and the training which leads to their fuller development. Pedagogy and the training for artizanship are two different things, and to mix them up directly would be to curtail the force in both that makes for race improvement. How did the Countess of Warwick ever find out that a certain class of boys were born to be ploughmen until the proper tests had been applied to them in legitimate school-work to prove that they were the "brainiest" of the boys of the parish? Would she really turn the Common School into a new providence that shall say what calling in life this boy shall take up and what duties the other will assume? Let her go to any of our "specialist" schools and see what the result has been, even when the effort has been made to emphasize the religious love of school-life by a rigidly frequent catechism training.

The following paragraph, taken from one of the leading educational periodicals of England, will show our readers how direct are the references in our contemporaries' columns to those whose desire it is to lead public opinion in the direction of their own misguided opinion. Were the editor of *The Journal of Education* writing for a Canadian constituency, and were he to use such direct forms of speech towards any of our dignitaries, educational or otherwise, he would possibly have to run the gauntlet of misrepresentation, which Major Hewton, of Richmond, has lately been subjected to according to his own showing. The way of the reformer is hard, and the plain-speaking publicist has a thousand and one frictional points to encounter, which his relevancy of judgment does not calculate on meeting. But our London friend has always a fearless way of facing the music when a sound educational doctrine is being played upon; and yet his paper continues to be the most respectable of our exchanges. This is a specimen of how he puts things: "The Bishop of London is one of the most learned, and, without a doubt, the most versatile, Bishops on the Bench; and, if he does not adorn, he at least enlivens, everything he touches. Last month he addressed an assemblage of teachers at Sion College, and appeared in the new *role* of a teacher. The main doctrines he enforced were familiar to all teachers, however little they may be practised—the necessity of exciting the curiosity and cultivating the curiosity of a child—in brief, the fundamentals that every master of method insists upon from the very first. These doctrines had not been gained from any study of pedagogics, but by experience and plain mother-wit. He began, so he told his audience, as a teacher, absolutely ignorant of teaching, and all he had ever learned had been at the expense of those committed to his charge. The natural inference from these premises is surely: 'What a pity for my pupils, if not for myself, that I did not start at at the point where I have ended!' Not so, Dr. Creighton. He concludes therefore, that 'Teaching is really an incommunicable art. It is a gift, like all other gifts.' We are not going to

reargue this stalest of all fallacies, which seems to have a peculiar fascination for the episcopal mind. But we may venture to point out that, however gifted by nature, Dr. Creighton is not yet perfect in the art of teaching. Whether history teaching should begin with the policeman or the Witenagemot is a moot point; and, though, in our opinion, the weight of argument is in favor of beginning with ancient history, the Bishop is entitled to his opinion. Can we, however, conceive a trained teacher beginning his history lesson; 'Suppose your father was drunk'? *Maxime debetur pueris reverentia* is a lesson instilled into every Board school teacher, though he may never have heard the name of Juvenal."

CURRENT EVENTS.

Dr. Paulsen points out the following as the deplorable and unwished-for results of public examinations:

(1) The examination changes the mental attitude of the student to the subject. His attention is drawn from the subject of study and fixed upon the examination. The constraint of an examination brings with it a dislike of the subject, and what one likes is dismissed from the mind as soon as the necessity for outward expression ceases. It is this distaste arising from compulsory examination that is responsible for the large amount of "learning by heart" from short and superficial works.

(2) The examination gives to previous study a tendency to be superficial and directed to what lends itself to recitation. The knowledge that can can be "shown off" counts for the most. Formulas, definitions, rules, forms, facts and dates lend themselves to repetition; in short, all that is external, that can be learned and recited, but not what one thinks or feels. It cannot be otherwise; examination questions are necessarily more tests of the memory than of judgment. The effect is that an undue importance is attached to mere facts. It is undoubtedly a fact that the student who, by "cramming," has primed himself with superficial knowledge and external facts, without much reflection, takes an examination with greater prospect of success than one who has read and studied with genuine interest the subject, and, perhaps, with far better results, to his own culture, but who has neglected the more recitable facts.

(3) Examinations tend to produce uniformity and mediocrity. An examination that takes into account, not only the standing of the scholars, but is also designed as a test of the master and the school, has necessarily the effort of producing uniformity. While in the intellectual life uniformity and equality are far less important than originality and variety, examinations tend to produce a mediocre standard for all students in all subjects. In every examination of a large number of persons, the clever ones find little opportunity for doing themselves justice; the questions must be chosen to suit the average candidate.

To sum up: State examinations tend to suppress individuality, to destroy independence, to promote superficial knowledge and to stamp out all attempt at original thought. The superficiality which at present goes under the name of education, the glib readiness to discuss all subjects, are undoubtedly the outcome of the technical public examinations. Examinations require knowledge that has no relation to the positions to be filled and do not take into account the special fitness of the

candidate. They encourage superficiality and neglect proper foundations. Finally, the possession of the certificate gives a false feeling of security and self-complacency.

This statement of the evil results of examinations does not imply a recommendation for their abolition. They are necessary evils, whose existence should never be forgotten. But we cannot return to the system of individual preference and patronage. All that we can do is to do away with superfluous examinations.

The following rules for the guidance of examiners are suggested by Professor F. Paulsen in his able contribution to Rein's *Encyklopædishes Handbuch der Pædagogik:*

(1) Lay stress upon the positive elements. The examination as such has the opposite tendency to bring out all deficiencies.

(2) Begin with easy, simple and specific questions. An obscure question and answer easily upset the whole examination.

(3) Treat mistakes and misconceptions after the advice given in Gal. vi. 1: "Brethren, if a man be overtaken in a fault, ye which are spiritual, restore such a one in the spirit of meekness; consider thyself, lest thou also be tempted."

(4) Do not forget that the majority of people do not put their "best foot foremost" in an examination.

(5) Do not forget the *suaviter in modo* in a desire for the *fortiter in re.*

(6) To recommend the unworthy and ignorant is to take away from the industrious and able man what rightly belongs to him.

One more bright page has been added to the fast closing book of the nineteenth century. Little Crete—poor, torn, distracted, blood-deluged Crete—the most beautiful island in the Mediterranean Sea—is free at last. For twenty-four hundred years its unfortunate inhabitants have been in a state of continuous warfare, until it has become proverbial as the isle of discord. In the time of Homer the little island boasted a number of flourishing cities and a dense population of the Hellenic race. It is recorded that the Apostle Paul visited it and established the Church there. From 1204 to 1669 A.D. it was under the control of the Venetians, who treated its people with great severity. In 1669 the Turks laid siege to Crete and captured it, only after a struggle of some twenty-four years. From that time to this has been one long history of treachery, oppression, tyranny and blood. The insurrection of 1866-69 was the bloodiest Cretan revolt of this century, and cost the Turkish Government thirty million dollars to suppress. During the insurrection of 1896, which led to the Turko-Greek war, the six great powers adopted a scheme of reform, which was imposed upon the unwilling Sultan by the admirals of the combined fleets. Owing to the laxity of the several powers in not sending sufficient troops to preserve order, the turbulent Turkish elements broke out once more, and this time killed a number of British officers and men. Admiral Noel at once took effective measures to punish the criminals, and in addition has now bundled the last of the Turkish troops out of the island upon a British transport, bag and baggage. As *The Globe* cartoon so aptly puts the whole matter: "The concert of Europe is doing good work for once, in bundling the Turks out of Crete. The reason appears to be that Britain is the whole concert." Prince George of Greece is the new governor, and we may now hope that with the twentieth century will come for Crete the rest and peace she has not known for more than two centuries past.

One reads through the address given by the Hon. G. W. Ross, to the Sunday School Convention at Peterboro', with a feeling akin to indignation. To know the Lord's will, and then not do it, is to confess failure indeed. According to Mr. Ross, "The moral element in citizenship was the enduring element . . . It was well known, too, that it was the moral element in a nation which preserved it from decay. It was the lack of this element which was answerable for the fall of the civilizations of Greece and Rome." We know that it is so—the moral element is indeed the backbone of the nation; and we naturally expect Mr. Ross to go on and tell us where the teaching of this all-essential morality, necessary to preserve the nation from decay, is to be found. Then, as the representative statesman having this part of the nation's well-being in his hands, to assure us that the text-book, which taught this necessary morality was already in the hands of every coming citizen of this Province. But what does he tell the teachers of Peterboro'? "In the Public Schools it was possible only to give moral education incidentally." Will everyone please take note of that? Can anything be more disappointing—can anything be more ominous for the future? The chief Minister of Education says that the essential element which is necessary to preserve this fair Canada of ours from decay can only be taught in the Public Schools "incidentally"—and that means——

Perhaps it was more than a mere coincidence that the daily papers of Canada all contained the following notice almost immediately afterwards:

PARIS.—*The Gaulois* announces that henceforth the motto, "God protects France," will be stricken from French coin. The paper remarks sarcastically that it is a good thing, since foreigners might be led to believe from seeing the inscription that Frenchmen still have faith in Providence. It suggests that the Government adopt the motto: "Schwartz Koppen protects the Republic."

This is one of the inevitable results of teaching "morality" in the Public Schools "incidentally."

On the day following the publication of *The Gaulois* telegram, a large public meeting was held in the town hall of Port Hope, at the call of the Archdeacon of Peterboro'. In addition to the influential clergy and laymen gathered for the Conference, the Mayor, together with the Presbyterian and Methodist ministers, was upon the platform, and took part in the proceedings. The Hon. S. H. Blake, Q.C., in a powerful address, strongly contended that, whilst our system of education admirably met the needs of the body and mind, it left the needs of the spiritual faculties untouched. He pointed out why the Sunday School was inadequate to supply the needs of the child, and said that, whilst the liberty of the subject must be respected, he would like to see the great Christian communions united in an endeavor to have the Bible placed upon the curriculum of the schools. He thought few would deny that this was an age of irreverence and disobedience. What he wanted was, first, the Bible as a text-book, and then to have its lessons taught through the medium of a catechism, in which all the questions were answered in the words of the Bible. Even as a literary production the Bible was of unparalleled value. He pointed out that the nations that ruled out or disregarded the Bible were the decaying nations of to-day, and concluded with an eloquent appeal for unity in forwarding the work of Biblical instruction.

We believe that Mr. Blake was well within the mark when he said that our

Sunday School system was entirely inadequate to supply the needs of the child, therefore of the nation which they are to become in the future. The great question before the people of Canada to-day is, "Shall our Public Schools be allowed to train up a race of educated heathen in which 'morality' is taught 'incidentally', or shall we demand of them the Bible as a necessary educational text-book in the schools of a Christian nation?" And surely Canada *is* a Christian nation.

The great event discussed in school and playground, at church and market, in newspaper and magazine, is the friendly alliance between the two great Anglo-Saxon powers of the world, which seems to be culminating as a force in the development of the present into a future filled with the most brilliant possibilities for the human race. It is not very well known that years ago the idea of an Anglo Saxon union was ably advanced and elaborated by Mr. John Redpath Dougall, of Montreal, in a splendid article in one of the English Reviews, and it must now be pleasant for the modest editor of the *Witness* to hear all that is being said of the alliance, years after he had made a careful study and forecast of the commercial and political aspects of the relationship between Britain and the United States. The movement is the most inspiring of the times and, though there are modest premonitions of storm in the little breaths of anxiety that blow from various quarters, there is a possibility of the alliance being matured into a treaty signed by both powers. These feeble premonitions, it may be said, are for the most part indicated in the trade jealousies and the Irish question, and nobody seems to care much to enter at any great length upon the close examination of these influences for the present.

It is a sad phase of child life to read the following in the light of the way of living even in our own large cities, where the idea of Prohibition is never likely to be viewed favorably by a majority of the ratepayers:

For some time the General Purposes Committee have been considering a resolution passed by the managers of the Waldron Road group of schools, calling attention to the fact that the work, which at great cost was being done in the schools to promote the mental and moral training of the children, was being undone to a very large extent by their being familiarized with the sights and sounds which were invariably associated with public-houses. The managers, therefore, urgently requested the licensing magistrates of Wandsworth to express a strong condemnation of the sale of intoxicating liquors to children attending the Elementary Schools of the district. The committee recommended that a communication should be made to all the licensing magistrates within the jurisdiction of the Board, expressing the Board's strong condemnation of the sale of intoxicating liquors to children of Elementary School age.

The movement in favor of school libraries is extending, and, when it is considered what can be done with a collection of books as a practising section or literary laboratory of the school, it is a wonder that the Canadian provinces have not put forth greater efforts to provide their schools with one. Talk about workshops being attached to our schools! The library is the most useful workshop a teacher can have in which to train a child to learn of the possible companions of his after life. In Ontario the Education Department has had in hand the supervision and fostering of school libraries ever since Dr. Ryerson's time; and Dr. Ross, the present Minister of Education, is as keenly alive to the necessity of the library as a school

adjunct as of any of the numerous school appliances to be found in the institutions under his direction. Dr. Harper, of the Province of Quebec, has fostered this idea of having a school library attached to the schools within his extensive inspectorate, and the movement inaugurated by him has now only to receive Government recognition and support to become a complete success. The "travelling library," which is not unknown in Ontario, is spoken of as steadily working its way in the rural places of the neighboring Republic, and the Dominion provinces that have not yet taken up the "school library" as something to be fostered may possibly be induced to try the plan. In a word, the travelling library is a select assortment of books of the best class, sent out at the expense of the State or of private individuals to country communities. The library remains a specified time at each point; then is moved on to give place to another selection. The cost of transportation and other incidentals is borne by each neighborhood.

The number of people who find their mistake too late in not taking all the schooling they can get is not decreasing. The writer meets them at every turn. Add these to the men and women who never had the chance of getting a good schooling, as the phrase goes, and one can well understand the number of people in the world who can appreciate the wail of a correspondent of one of our journals who signs himself "Ignoramus." A book bearing the title of "Ignorance" had fallen into the hands of "Ignoramus," and in speaking of it he expresses himself as follows: "The author says, and I fear rightly, that after the usual course of school and college the majority of both men and women forget that education is a thing that must last their whole lives long if they are to be truly cultured, and rarely read, save such books as touch on their profession or trade, fiction, newspapers, and magazines. He points out some new ideas for use in educating the future generation, which are good in many ways, but I would ask him for help for the present one. Many a man and woman debarred by accidents of poverty or health from being educated in their youth, and many more who wasted or let drop their opportunities, would now gladly educate themselves did they know the way, but pause appalled at, and shrink from, a plunge into the great mass of instructive literature without some clue to guide them. Will not Mr. Dorman follow up his work on 'Ignorance' with a pamphlet or newspaper article giving a few different courses of study suitable for men and women which might at least start them on their work of self-culture? He would gain the thanks of many, and it would be a practical way of helping them out of that slough of ignorance which he deplores, and teach them to know 'something of everything,' even if they never reach the height of knowing 'everything of something.'"

The Hon. Joseph Chamberlain's speech on the Fashoda affair has drawn attention to the iniquitous "dog in the manger" policy which has crippled Newfoundland so long. So *The Montreal Gazette* says, "it comes as a breeze of hope to the people of that colony." Great Britain, as that newspaper pertinently remarks, has for years pursued a policy of doing nothing to offend French susceptibilities, and the Newfoundlanders believe that such policy was taken advantage of by France to add to their difficulties on what is known as the French Shore of their island. By a treaty made before Great Britain's statesmen appreciated what their American territories would come to, French fishermen were

given privileges on the then unoccupied coasts that, as they are now asserted by France, are found to be an evil, retarding the legitimate development of the colony by depriving its people of the opportunity to use its natural resources. From rights that, by the island contention, were never intended to give anything but equality with the British residents, French statesmen and French ship captains have developed their claims till they assert that British residents on British territory have to make way for a Frenchman whenever he appears. Lobster canneries, in which Newfoundlanders have invested large sums of money, have been shut up, in obedience to French demands, and other things equally galling to Newfoundlanders have had to be submitted to. Protest has been unavailing, and sometimes it must have been a strain on the islanders' sense of duty to agree to what was required of them, in the interests of the Mother Country's good relations with a foreign power. The constant dropping of colonial protests has served its purpose to some extent, however. Admiral Erskine and Sir John Bramston were this year sent out as a royal commission to enquire into Newfoundland's grievances, and, while their report is not yet published, it may be inferred that its summing up of the situation, or, at least, the preliminary statements of its framers, must be of a nature favorable to the colony. Otherwise Mr. Chamberlain would hardly have spoken as he did. Newfoundland, he says, is seriously suffering from an intervention which is of no advantage to France, although a serious detriment to a British colony. The end of the trouble is not likely to come immediately. There will be no notice to quit, such as the Fashoda occupation led to. But, with a leading minister taking such a position, it is fairly sure that the matter has reached a new stage, that Newfoundland now has a powerful friend, where before it had only unsympathetic listeners, and that something will be attempted for the removal of the cause of grievance. An insistence that the French fishermen who frequent the shore shall have nothing that the words of the treaty do not provide for may be the first step towards the end.

It is said, and with some show of truth, that the higher salaries paid in the Board Schools of England are attracting teachers who a few years ago would have entered secondary schools. But there is another side to the question. Witness the fact that a School Board in Wales is advertising for an assistant-mistress to take charge of the sewing and to teach infants, at a salary of £15 a year. Another recent advertisement is more amusing than tragic. A certificated mistress is needed in a Church school. She is to have no family, but must possess a husband who is "an experienced farm laborer."

During last summer vacation I paid a visit to the Niagara peninsula, and was fascinated by its manifold attractions. This is the name given to that part of the Province of Ontario, Canada, which lies between Lakes Erie and Ontario, and is bounded on the east by the great river. It is a land of gardens, of orchards and of pleasant homes. The sylvan beauty of the inland scenery contrasts strikingly with the magnificence of the cataract and the awful grandeur of the river gorge. In the quiet village of Stamford, but two miles from the whirlpool, the traveller who has visited old England recognizes a perfect reproduction of a Lincolnshire village, with its quaint little church lighted up by the variegated colors of memorial windows—the stained glass no cheap product, but something worth gazing upon. Probably nowhere on the continent is

there to be found so delightful a ride for the wheelman as that from Buffalo to Niagara Falls, and thence through Stamford to St. David's, Queenston and Niagara-on-the-Lake. It affords a combination of all that is delightful to the senses—side paths like silk, shady avenues, exquisite prospects. There are two noble panoramas—that of the Falls, as seen from the upper steel bridge, and that of the lower Niagara River, as seen from Queenston Heights. Nor is the historical sense left without stimulation. Almost every mile along the way is associated with some daring deed, or some eventful contest. Here the gallant Miller made his famous dash at the battery; there Winfield Scott surrendered; there Sir Isaac Brock fell; there Laura Secord, the heroine of Canadian story, started out on her famous midnight walk.

It is impossible in reading the story of the War of 1812 as it affected the peninsula not to feel a warm sympathy with the people who were fighting for their homes and for their historic flag. Now at the close of the nineteenth century, when the Republic has asserted itself as not the least among the great nations of the earth, her historians are beginning to do justice to the colonists, who, differing from the majority in the great struggle of the Revolution, were branded as Tories, credited with countless crimes and misdemeanors they were never guilty of, and ruthlessly expelled from their homes. As United Empire Loyalists in their new domicile in Upper Canada, they established on the shores of Lake Ontario a community marked by all the essential excellencies which the modern social philosopher delights to enumerate as he contemplates the America of our day.

At the time of the war the population of the whole province was about 85,000; now it is 2,225,000. The people may well be proud of the reputation they enjoy. An incident which happened to me may serve to illustrate this. As I was skimming along from Tonawanda one morning, after a visit to Buffalo, a piece of slag in the treacherous cinderpath punctured my hind tire. A pleasant-faced woman, aided by her family, all bright and helpful, repaired the injury, the husband, who carried on the business, being absent. I told her I was returning to Niagara Falls, Ontario. Inferring (wrongly) from this that I was a Canadian, she remarked that Canadians often stopped at the repair-shop. "And every one of them has treated us well," she continued. "I wish I could say the same of the people on this side, although I am an American myself."

The scene of the most bitterly contested battle of the war is close to the great cataract. The eminence for the possession of which so many brave men lost their lives is now crowned by an unæsthetic observatory tower. Across the way is the quiet cemetery by the Presbyterian Church, where many of the dead lie buried. To the Canadians the spot awakens memories similar to those of Bannockburn and Marathon. It was here that the last of four successive invasions of their soil was sturdily and definitely repulsed. A monument has been erected by the parliament of the province in honor of the patriots who fought on that memorable evening in July, 1814, and, after the hardest of struggles conquered.

Most American visitors, remembering the account of the battle as given in their school histories, are puzzled, amused or chagrined at the confidence with which the keeper of the Lundy's Lane Observatory insists that the inscription on the monument is wholly justified by the facts of the case. When they begin to investigate matters for themselves they are mortified. They find that they have been fooled by their school histories. The follow-

ing is from an account of the battle as given in a widely read history for schools:

"At midnight the British gave up their efforts, and left the Americans in possession of the field. This battle of Lundy's Lane, or Bridgewater, was one of the most hotly contested actions ever fought in the new world. Three thousand Americans and 4,500 British took part in it. The former lost 743 in killed and wounded; the latter, 878."

The above is complete fable. The requirements of grave historical accuracy overturn nearly every statement made.

"At midnight the Americans gave up their efforts, and left the British in possession of the field. . . . Four thousand Americans and 2,840 British took part in it. The former lost about 1,200; the latter, 878."

The second in command of the United States forces, General Peter B. Porter, in a letter recently published by the Lundy's Lane Historical Society, dated Aug. 12th, 1814, and addressed to D. D. Tompkins, Governor of New York State, specifically calls the battle "a defeat," in which "the dead, the wounded, and captured artillery and our hard-earned honor were left to the enemy." The general who commanded the American forces at the close of the battle (Brown, Scott and Porter all being wounded and *hors de combat*) was court-martialed, as were Hull after his defeat at Detroit, Proctor after his defeat on the Thames, Prevost after his defeat at Plattsburg. It is true the court-martial terminated abruptly with General Ripley's acquittal—for a verbatim account, again consult the Transactions of the Lundy's Lane Historical Society—but it was as a defeated general that he was brought to account.

The admirable Josiah Quincy, whose life and character Lowell has outlined for us in his essay, "A great public character" in "My Study Windows," was bitterly opposed to the invasion of Canada, which he characterized as a "buccaneering expedition." When disaster followed disaster, he regarded these as by no means so disgraceful as the initial crime of the invasion. Many patriotic Americans have agreed with Quincy; but that is by the way. Certainly one undoubted disgrace still remains to be wiped out; the narration of the history of the war as far as American writers have undertaken the task. The Canadian, Kingsford, in the eighth volume of his "History of Canada," has done good work; but we want it done from the American standpoint. As matters stand at present, American visitors to the peninsula, in quoting their historians as authorities, expose themselves to ridicule.

To quote one signal instance out of many. Any serious student of the campaign of 1813 knows that the lowest point in the fortunes of the British defenders of Upper Canada was reached when Chauncey, with his fleet, landed a victorious army of 4,000 men at Niagara on-the-Lake, and left General Dearborn master of the situation. The British hurriedly evacuated Fort George and retreated to their last rallying-point at Burlington Heights, near what is now the prosperous city of Hamilton. Until reinforcements should arrive they numbered barely 1,500 men, in all respects badly equipped. The victorious American army, nearly 4,000 strong, moved along the lake shore to drive them from their position; and to await the attack probably meant defeat and the loss of the province. On June 5th the invaders were but seven miles off, at Stony Creek, in a well-chosen camping-ground. This date marks the turning point of the war. A brilliant exploit on the part of the forces at bay changed the attacked into pursuers, and completely demoralized the invading army, so that henceforward it accomplished nothing. A chosen band

of 704 redcoats, under a leader who was afterwards famous at Waterloo, stole into the American camp shortly after midnight, bayoneted the pickets, dispersed the bewildered battalions as they attempted to form, captured two of the eight field-guns, and retired before daylight should disclose the paucity of their numbers, with the two generals, Winder and Chandler, and over a hundred others as their prisoners. It is one of the best instances on record of "rushing a camp."

The following is the garbled account served out to the American schoolboy:

"A superior force of Americans set out in pursuit (of the British to Burlington Heights), but were attacked at night by the British while encamped a few miles from their lines. The enemy were so warmly received that they beat a retreat, but they had managed in the melee to capture the American generals, and the officer left in command shrank from the responsibility of further offensive operations, and fell back to await orders from Dearborn. This was unfortunate; an immediate attack on the British could hardly have failed of success, for their general also had been separated from his army in the darkness, and was found next day several miles from camp with neither hat nor sword."

He ends here. The real fact is that, before the American army got back to Fort George, the retreat rendered necessary by the demoralization, consequent on the night attack, had turned into a flight; and that the story of the wanderings of the British general in the woods is a silly fabrication. It is on a par with the "Booty and Beauty" yarn with which Hildreth absurdly closes his account of the battle of New Orleans, and with the story of the scalp found above the Speaker's chair in the Parliament House at (Toronto) York. Our historian gravely narrates this fable, and has no space left for the important action at Beaver Dams, where Laura Secord so highly distinguished herself.

Examples like the above could be multiplied *ad nauseam*; but I have quoted sufficient to show how our schoolboys are taught fables after the manner of the Chinese. It is impossible to learn the valuable lessons which history teaches when the writers who have the national ear, through laziness or incompetency, retail garbled or invented historic material, fit only to tickle the national vanity.

A pan-American Exposition is projected for the year 1901. It is to be held at La Salle, six miles south of the great cataract, and near the spot where the intrepid French explorer built the first vessel to navigate the upper lakes. Hundreds of thousands will visit the locality, and will have their minds turned to the deeds of the past. The history of the district begins so late as 1678, and covers no very long period. We are beginning to have history written in a fair and judicial spirit, which scorns prejudice and mis-statement. Mr. Clowes, who is now publishing a history of the British Royal Navy, a magnificent work, has magnanimously entrusted to our late Assistant Secretary of the Navy, Mr. Theodore Roosevelt, the task of narrating the naval operations of the War of 1812. He is certain to discharge the delicate task efficiently. We shall have no repetition of the juggling with figures. I quote again from the same precious school history, which makes Perry capture 600 prisoners, when the enemy went into the fight with but 384 men in all! Let us hope that before the Exposition opens some competent historian, of the calibre of Mr. Roosevelt, shall have given us a trustworthy history of the land operations during the same period. The present histories are not staffs to lean upon, but reeds which pierce the hand that trusts them.—*By Prof. J. M. Dixon, F.R.S. Edinburgh, of Washington University, St. Louis, in The Independent, N.Y.*

MAGAZINE AND BOOK REVIEWS.

In the November number of *Scribner's Magazine*, with which the year ends, their two important serials are concluded. Red Rock, by Thomas Nelson Page, has fully sustained the promise with which it was begun, and should be a considerable addition to the historic literature dealing with the Civil War in the United States. As is well known by this time, "The Workers," by Prof. Wyckoff, treats of social conditions. It doubtless will give a strong impulse to true humanity, but in it the observant reader will also discover that the tendency in the novel of the future will be not to the invention of imaginary episodes, however true they may be to the principles and ethics of art, but to the relation of what has actually happened in the author's life, hidden and altered as may be necessary. Letters of Robert Louis Stevenson will form one of the most important departments in *Scribner's* for 1899.

Lippincott's is always distinctly popular in the character of its literature. Having no illustrations, it gives all its space to useful and entertaining reading matter. It has no serials, so each number is complete in itself, but it will during the next year retain its most distinctive and popular feature, a complete novel in each issue. *Lippincott's* is one of the few well-known magazines that are as well pleased to have a good story from a new writer as from one who is better known.

The November number of *St. Nicholas* was a birthday issue. This magazine, for children, is now twenty-five years old, and it still is happy in the services of its first editor, Mary Mapes Dodge. The indefatigable and popular Mr. Henty begins a serial which treats of American history, and Mrs. Barr will contribute during 1899 a romance of Old New York. On the last page Gelett Burgess adorns a moral—a very plain one—with his Goop Babies.

The Bookman, since it is *The Bookman*, tells us in its November issue all the current information, and a trifle more, about Cyrano de Bergerac. There is also something about Mr. Hall Caine and his "Christian," one cannot take the responsibility of calling it anybody else's, along with a picture of Glory Quayle, overcoming the Rev. Mr. Storm, which ought to keep a good many people from going to the play. Clement Shorter is particularly happy in "A Literary Causerie" for this month.

One may ignore the late war in another magazine but not in the *American Monthly Review of Reviews* for November. The most important contribution on this subject is from Mr. James Creelman, and is entitled "My Experiences at Santiago." Mr. Creelman is a gentleman who has had other opportunities of forming war impressions from the standpoint of a correspondent, and this makes his experiences all the better reading. One of the most important items in the list of contents is An Impeachment of Modern Italy by Ouida. There is a reply to this in the same number by Giovanni Della Vecchia.

The Thanksgiving number of *The Youth's Companion* contains a sketch of Mary E. Wilkins, entitled "Seventy Years Ago in New England," which is written in her own amusing strain. It is illustrated by a charming drawing. There is also a jolly circus story by J. L. Harbour, with most successful illustrations. The number is a particularly good one, and, as usual with *The Companion*, one can feel sure that the success which it merits will follow.

The *Saturday Night* has achieved a genuine success with its Christmas number. The colored plate. The Mystery of the Morn, deserves all the flattering things that have been said about it, which is a surprising thing when one considers

the general rule. The stories are, almost without exception, interesting, the first requirement of every reader whether he be professional or non-professional, so far as literature is concerned. Mr. Sheppard is to be congratulated on his account of the tragedy of a South American Republic; Mack contributes a short story entitled, "Rebel Met Rebel," which is a considerable advance on anything he has before published, and which justifies one in saying that Mr. Clark has attained success in this department of literature. Among other contributors who may be mentioned are Mrs. J. K. Lawson and W. A. Fraser.

Mr. S. R. Crockett's latest volume is entitled "The Red Axe." It has been recently issued by the Copp, Clark Company, Toronto. For the meantime Mr. Crockett has exhausted Scotland, and is following the fortunes of one of his brotherhood of adventurers in Germany. In the first chapter or so the story is a little too red, or "bluggy," as the small boy used to say, but after that the author deals successfully with the romance of the Middle Ages, and adds another to the already long list of his readable books. It was announced some time ago that Mr. Crockett was pledged to write so many stories for many years ahead. There is every evidence of this being true, but when his time of servitude is over he will accomplish success more happily by taking time.

Received from Macmillan & Co., through their Toronto agents, The Copp, Clark Co.:

"Macaulay's Life and Writings of Addison," edited by R. F. Winch.

From the American Book Company, New York:

"American Elementary Arithmetic," by M. A. Bailey. "A Primary Arithmetic," by A. R. Hornbrook. "Language Lessons," by J. G. Park. "Geographical Nature Studies," by F. O. Payne. "The Story of the English," by H. A. Guerber. "Outdoor Studies," by J. G. Needham. "A Short Course in Music," Book 2, by F. H. Ripley and T. Tapper.

We have received from W. and A. K. Johnston, Edinburgh, their latest map, an excellent one, of the Dominion of Canada. The new territories, especially the gold districts, are marked out with the latest developments, and are among the many considerable changes that make even modern maps of our Dominion out of date. While a Canadian can never scan such a thing as a map of his own country without lamenting some eccentric dash of the boundary line, at the same time the more than sufficient greatness of the country at our disposal is even more plainly evident. The map is specially commended to our schools

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