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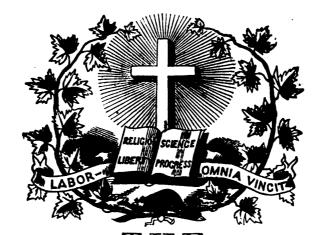
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The Kindergarten, in Belation to the Higher School.

Paper read by Miss M. E. BAILEY before the College of Preceptors.

Considering the interest excited by Kindergarten teaching during the last few years, and the fact that such teaching is almost exclusively committed to ladies, I shall trust that it will be considered neither presumptuous nor unbecoming that a lady should venture to lay her experience on the subject before such thoughtful and well read hearers as one may expect to find at a meeting at the College of Preceptors. The condition of the school proper is so directly affected by the Kinder-garten; it is so important that teachers at large should know exactly how far Fröbel, the originator of the Kindergarten, advanced beyond the discoveries of earlier educationalists; and yet it is so common to find men withdrawing as shyly from the study of the Kindergarten system, as they would from that of domestic management, that I trust to do a real educa-

and his work, and if I can help them, even in a slight degree, to judge of the merits of the next Kindergarten they visit. Men certainly are more generally versed in mental and natural science, and in mathematics, than women, and all these are necessary qualifications for critics of the Kindergarten system. Generally, too, they have also a wider and sterner experience of the world, to give them a cooler and more dispassionate view of circumstances. Again, they have equal duties to the rising generation; and though I cannot allow that they have the quick sympathy, delicate tact, and patient affection needed for excellence in actual Kindergarten work, I am quite sure that there is every need of their more accurate knowledge, and keener supervision of principles, to keep what has been enthusiasti-cally termed the "New Education" from deteriorating, and to unmask ridiculous and injurious imitations of it. We look to them to supply the greater part of the funds to support Kindergartens, and we know that they have often a more painful sense of irritation and disappointmoint at the educational deficiencies of grown-up sons and daughters than women have. Why, then, do they not examine closely into the merits of a system by which impostors can certainly cause them much expense, and by which skilful earnest teachers can promote the intelligence and happiness of their little ones in a most marvellous way? It is true that a special training is needed for the acquirement of much mechanical skill in the various occupations of the Kindergarten; but anyone who has had a Pestalozzian training, any well-read and practised teacher, anyone who thoughtfully follows the excellent mental science lectures provided in the present training course for teachers by this College, is prepared for an intelligent view of Fröbel's great discoveries. Like many of the greatest benefits conferred upon us by the labours of other great men, the Fröbellian methods are based upon such obvious and natural truths, that, even if we see their logical relation to each other, the chances are that we may perhaps from our own inexperience fail to see their originality in grappling with certain educational difficulties never thoroughly dealt with before, or tional service, if I can provoke both ladies and gentle- difficulties never thoroughly dealt with before, or men to an earnest and intelligent inquiry about Fröbel perhaps in the course of long conscientious and successful labour we may have acted in harmony with so much that Pestalozzi and Fröbel believed, that we resent the slight put upon our efforts by the more excitable advocates of the Kindergarten. In other words, we may know too little of the history of the early stages of human development to see how deeply Fröbel had studied them, or we may have puzzled and experi-mented so much as not to be content that another should have so far outstripped us.

I hardly know what to do about attempting a sketch of Fröbel's life, and yet I cannot work out my paper without some allusion to it, for his educational system was undoubtedly the fruit of a series of special influences operating upon a sensitive, romantic, poetic temperament, an affectionate disposition, and a mind that found extreme pleasure in studying human developement, natural science, and mathematics. I think it is Herbert Spencer who describes great men as persons whose special temperament and qualifications make them the best exponents of the age and people to which they belong,—persons whose very nature has cooperated with all circumstances of time, place, and opportunity to make them the representative men of the truest thinkers of their time. Apparently in this belief the "Die Entwickelung seiner Erziehungsidee" of Fröhel, by Alexander Hanschman, an ardent admirer of Frö-bel's, was conceived,—a biography of the most interesting character.

It is a great deprivation to the educational public that this book remains untranslated. From it we learn that Fröbel lived from 1782 to 1852. At the opening of this period we find him a motherless infant, stinted of leave to indulge in childish play, too shy to be attractive to other children, and almost ignorant of any tenderness and care from his learned father, who was a German pastor. The stepmother, under whose charge he came at four years of age, treats him at first with affection, but soon sets him aside in her exclusive care for her own child. Her coldness grows into dislike and injustice, and her harsh judgments and cross taunting words form a frequent and heavy trial to Fröbel throughout boyhood and youth. He finds solace in dreaming over the natural objects within his ken, in watching the very growth of the plants in the garden and yard to which he is generally confined; he enjoys the lessons and society he finds at the village girls' school, to which he is first sent; he ponders over his father's allegorical sermons; he is all aglow with happiness when his uncle takes him away, at ten years of age, to a happier and more equitably managed home. Under the old-fashioned illogical methods of school as he sees it, he shows little aptitude as a scholar, and yet he longs to be a student like two elder brothers. His stepmother, and his father's limited means, are against The imaginative, inquisitive child becomes a youth, it. who delights in introspection, and is fond of mystical and speculative reading,-who lends himself with enthusiasm to anything which promises to advance his own self-culture and his visions of a higher future for man in this world, and who is decidedly, though perhaps unconsciously, obstructive to all plans for settling him in a mere business career. At about twenty years of age, he becomes acquainted with Herr Grüner, who had then a Pestalozzian model school at Frankfort, and who, perceiving the true bent of Fröbel's mind, invited him to become a teacher. The misfortune of just then losing all his testimonials from former employers decides the young man into acceptance. Launched in his new mode of life, he now sets steadily Launched in his new mode of life, he now sets steadily before him this long cherished aim of ennobling huma-nity by his labours. He takes advantage of his first philosophers' methods, and directs them towards on^B

holiday to visit Pestalozzi at Yverdon, and later still, in 1807, he takes his pupils, the sons of Herr von Holzhausen, with him to Pestalozzi's school at Yverdon, and works with them there for three years. He has a profound respect for Pestalozzi's devotion and originality; he sympathies 'heartily in Pestalozzi's advocacy of object-teaching, and of the harmonious education of the physical, moral, and intellectual powers of children; he agrees entirely to the Pestalozzian maxim, that teachers should proceed "from the known to the unknown from the simple to the proceed in the unknown, from the simple to the complex, from the concrete to the abstract; " but he cannot be blind to Pestalozzi's incapacity for government and discipline, and he fails to find anything like a thorough provision in the Pestalozzian system for gradual and continuous training and development of the child from the cradle through infancy, childhood, and youth. Do not for a moment believe that Fröbel would have depreciated the mission and labours of Pestalozzi. An American writer even says, "But for Pestalozzi and his predecessors, Fröbel might not have worked out his method, as their conclusions were his starting point, and their hints and practical endeavours he carried on towards perfection." Our next point will be to consider the stage of education which Fröbel found by experience to have been neglected, and then it will be interesting to observe on what great principles he built up his own system.

For some years after Fröbel had left Pestalozzi, he carried on a boys' school of his own, and he found, what many others have found both before and since, that it is impossible to crowd into the school years all the instruction needful for a boy's after success in the world, as well as to carry on that harmonious training and development of the child's whole nature, which he justly considered to be more important than the acquiring of a mere number of facts. As Miss Shirreff so well expresses it, "He had thought that better trained teachers would attain this object, but the result proved that the difficulty lay deeper still. It was in the condition of the children themselves, who came to school with undeveloped or misdirected faculties; and, henceforth, he devoted himself to the subject of early education, which gradually absorbed him more and more. For years he had tried the education of boys through men, and had failed in reaching his ideal; he now turned his attention to preparing for school education by training the infant faculties through the hands of women.'

To provide a system of education of a truly natural and scientific character, he found that student and observer as he had been for so many years, he could not consider himself in possession of sufficient scientific knowledge and leisure to work a system out without still more University training. In July, 1811, we find Fröbel entering the University of Göttingen as a learner, The aim of his studies was to find the scientific way of providing a natural self-developing education. He felt the necessity of establishing a harmony between natural science and philosophy, and seems to have taken great interest in the work of Leibnitz upon the "Harmony of body and soul." In 1812, we find him at the University of Berlin ; and the mere mention of the professors then teaching there will indicate the influences to which be subjected himself. Fichte was professor of philosophy, Schleiermacher of theology, Weiss of natural history, and Niebuhr of history. The first two natural history, and Niebuhr of history. of these seem to have been especially attractive to

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true human life. He also took up the study of crystallo- stated, and I am anxious to name the book from which graphy, which seems to have completed his study of I quote as an American work of moderate size which development and gradual formation in all the realms of nature. In 1813 he joined the great patriotic volunteer movement for the protection of Germany against France, and it is noteworthy that he served in the corps under the "Turnewater Jahn," who so warmly promoted the practice of gymnastics in Germany as a means of securing national strength and independence. During this service he contracted his remarkable friendship with two Berlin students, Middendorf and Langethal, who were afterwards enthusiastic fellowworkers with him to the end of his life. In 1814 he returned to the University of Berlin; but circumstances soon led to his trying his new system of education, first at Griesheim, and then at Keilhau. His want of worldly prudence and economy prevented the achievement of any great success by these ventures. He wrote a great this material (*i. e.* by rendering it similar to themselves, deal, and produced his great work, the "Education of Mankind," but without securing that influence upon exercise. Again, if the powers are to reach full vigour, national education to which he aspired. In 1831 he went to Frankfort, and soon afterwards he removed to Switzerland. The Swiss government was the first to countenance Fröbel's labours by any support; and it was in Switzerland that he began to train teachers, and to work especially in the cause of *infant* education. The failure of his wife's health led to his return to Germany in 1836, and from that time to her death in 1839 he could only plead for his views by writing and lecturing. In 1840 he returned to Blankenburg, near Keilhau, to establish the very first Kindergarten, which was the embodiment of his latest impressions and of his most mature convictions as a teacher; and the last twelve years of his life seem to have been devoted to the mission of leading women to a higher and truer view of their responsibilities in regard to infant training. With this I close my attempt to sketch briefly the influences under which Fröbel lived, and to shew the general drift of his lifework. I have made no attempt to give a complete memoir. Miss Shirreff's little book will supply a much better one.

It is very important to take into full consideration the immense amount of thought, experience, and study that Fröbel went through before producing that system of occupations which is calculated to be the means of a truly philosophical course of infant teaching. I have often been grieved, but I am no longer surprised, that over its proper assimilation, and guide the exercise of these occupations or gifts are used with very little the powers thus strengthened. In its negative phases, advantion must protect the organism against injurious comprehension of their true use on the part of many teachers. It seems to me that even in Germany, where influences, keep hurtful food away from it, guard Kindergarten teachers often commence their training against over-feeding, and prevent an undue extension Kindergarten teachers often commence their training course at fourteen or fifteen years of age, and begin to practise at sixteen or seventeen, the Kindergartens are not always carried on with a full sense of their real office. The late Professor Payne's book verifies this. He approves the Kindergarten system as "a real and natural education," but he is quite of opinion that the Kindergarten teachers whom he saw were far from always being persons of sufficient culture to understand the system they practised. He found that the Kinder-garten students ranged from fourteen to twenty years of age, and he says, "I am convinced that a year's training for a girl of fourteen years of age cannot **Possibly** prepare her to carry it out; and I am further of opinion that for fourteen years of age seventeen ought to be substituted. Up to this latter age, the general education of those who are intended for teachers ought to go on without interruption."

Let us now turn to what is truly the ruling principle in Fröbellian teaching. I adopt quotation again, for 1 exclusive reliance upon self-activity on the part of

aim-the art of living, the harmonious formation of do not think the facts in question could be more clearly gives a remarkably simple, and straightforward, and thorough idea of Fröbellian principles. In Hailman's "Kindergarten Culture in the Family and Kindergarten," published in New-York, we find the following " The general feature that unites all the methods of the new education is development-evolution. They labour to aid and direct the unfolding of the various germs of capacities and faculties of the young human being to ever higher and more complex forms of existence. This development is, in all cases, strictly organic, i. e. from within outward : it is growth, subject to the ordinary laws of growth.

"The various powers will grow, like the physical portions of the animal organism, by taking into them selves suitable material from without, by assimilating their growth must be gradual, and continuous. It must be gradual—i. e., slow,—moderate enough to give time for thorough, efficient assimilation of the appropriated material. It must be continuous-i. e., starting from a given point it must progress steadily, without breaks or leaps. Breaks that reduce a given power to idleness, will cause this power to lose much of the substance and vigour previously acquired-(how I wish some parents knew this when they take their children from school to school !) :--leaps that induce a given power to attempt what lies beyond its strength, cause a reaction which is always injurious, and often fatal. Only if the growth is gradual and continuous, only if everything presented and required is within the scope of the pupil's powers, only if the powers are continuous and fairly exercised, and every new step is taken on the basis of previous attainments, can we expect to develop powers that approach their maximum of susceptibility and vividness and vigour,—powers that will enable the individual to emancipate himself from leading strings, and to do his work independently.

"Education, then, can create nothing. It only can, in the positive phases of its work, place the organism in the most favourable circumstances for growth, for the unfolding of its powers, for increase in substance and vigour; it only can offer appropriate food, watch over its proper assimilation, and guide the exercise of education must protect the organism against injurious of the powers. It may be added that these phases-the positive and negative phases-do not claim the same relative attention at all times. The work of early education is mostly negative, and positive education, although steadily growing in scope and importance, does not, on an average, gain the ascendancy over her sister until the third or fourth year of school life.

" The negative phases of education require, in addition to an intimate knowledge of childish nature, and a clear enthusiastic appreciation of the proximate ends and the ultimate aim to be attained, a great amount of tact and patience; the positive phase, a certain amount of positive knowledge and skill, whose character and extent depend on the stage which the pupil has reached. These considerations are of paramount importance in the selection of teachers ; to regard them is to succeed, to disregard them is to fail.

"The methods of the new education place almost

the growing human being. This is a necessary consequence of the theory of development. If the development of the young human being is organic growth. it follows that he has to do his own growing, that nobody can do it for him, that he will derive lasting benefit only from what he does himself. Only selfactivity can induce the powers to grow, and the methods must labor to induce vigour-self-activity and to keep it in the proper channels. Good habits of observation, thought, and action—good habits in the formation of ideas and purposes as well as in their expression—organised knowledge and skill-can grow only from vigorous, well-directed self-activity, involving the use of all the respective powers of the young human being. Indeed, man naturally delights in activity, and his desire for activity grows with the growing powers; laziness and indolence invariably result from false education.

" Thus, in intellectual culture, the first and foremost business of these methods is to arouse attention ; in other words, to induce the intellectual powers to action to unite the impressions that attack the senses from all directions, to combine them with similar fertilizing powers into clear perceptions. In the development of higher formations the pupil must remember—i. e., re-excite previous formations to new activity,—and imagine them variously united or modified.

" These and other things the growing human being must do himself, and in proportion as he is indepen-dently active within the scope of his acquired know-ledge and skill, his powers will gather strength that will fit him for greater activity, and guard him against the curse of satiety, and its offspring indolence. And so in all things, the emancipation of the individual, his independence, can grow only from selfactivity, and an educational effort is faulty whenever it saves the pupil wholesome Iabour and has a tendency to satiate " satiate.

Frobel's mind undoubtedly was deeply religious in tone, and he held religion to be the fundamental principle of education. He belonged, however, to the rationalistic school of German thought, acknowledging God as the Unity of all things, the Father of mankind; but only seeing Christ as the Firstborn Son of God, because he believed Him to be the first who was thoroughly penetrated with a sense of His childlike relation to God. The most sanguine of Fröbel's disciples seem to think that the Kindergarten might assist in evolving perfect characters. I must confess that my view of Christianity dees not harmonize with Fröbel's, and that my expectations from the Kindergarten system cannot therefore mount to such a height. I have had abundant proofs that the mysterious *tendency* to sin does not exist to a less degree in Kindergarten pupils than in children under conscientious and religious training elsewhere; but still I regard the system as a valuable link which they belong. From the third to the end of the sixth year the only activity natural to the child is play. and therefore Frobel accepted play as the natural means of education at this age. He distinctly advised abundant proofs that the mysterious tendency to sin valuable link which has long been missing in the education of the young. I know that it promotes their well-being, intelligence, and happiness, and I could not think much of the judgment or generosity of anyone who contended against the simple natural way in which it seeks to tend and guard the little ones as lilies in God's own garden.

We now approach the immediate aim of my present lecture, in considering the duration and characteristics of the several periods of education recognized by Fröbel. Such divisions are necessary for convenience of description, and they also indicate the points at which a change of teacher and school can most profitably be made. We must always remember that the rooms, appliances, methods, teachers, and companions training is to be made as continuous, as connected as all favour that pursuit of play so necessary for its true possible, and that the child's own self-activity is always | development.

to be regarded as the most important means of development.

FIRST PERIOD.—The first period, which should embrace the first three years of the child's life, should be conducted at home under the direct superintendence of the mother. In this stage the developement of the human mind is chiefly animal; the self-activity of the child takes the form of mere doing for the first twelve or fifteen months. At a more advanced stage it begins to imitate or try to play, but it cannot be expected to play well by itself. If in this stage the child is guarded against receiving incorrect perceptions, and if it is trained to a right use of its limbs and its organs of speech, we may consider the intellectual part of its education well cared for. Even at this early age, a judicious mother will not neglect the exercise of a wise control over her child's habits and disposition. It will soon appear that the chief characteristic of the home education is not to be brought near him if the mother can prevent it. For the help of mothers in this respect, Fröbel composed numbers of rhymes and cosseting songs to take the place of absurd old nursery rhymes. He laid down rules for the selection of toys, by which he specially excluded expensive, useless, complicated, and fragile playthings, as well as all those that contain anything unhealthy or hurtful, or which suggest any thing ugly, impure, or immoral. He farther described points of excellence that would characterize a really good toy. This is the educational stage at which a good mother or nurse would take special pains to assist bring to the little one if carried on into school life, and perhaps even into manhood. We all know how grotes que and ridiculous a very sensible man's speech may appear, if much disfigured in this way; and we all know that the most solemn and pathetic things lose immensely by being pronounced in a lisp or a gabble. And yet those who heard and thought over our chairman's lecture at the Fröbel Society on "Vocal Gymnastics," must have been convinced that English children at least need some training and supervision to help them to utter the many difficult combinations of consonants in our words.

SECOND PERIOD .- The second or true Kindergarten period extends from three to seven years of age. In this stage of development, not only perception but imagi-nation is exceedingly active. The child recognises things, and also recognises qualities, but not in an abstract form; only in connection with the objects to mothers to place their children at three years of age in a play-school under a properly trained teacher.

1st. In order that the little ones may now be associated with their equals in age and attainments. Children who are constantly in the company of parents and older relatives are apt to be encroaching and unduly precocious, showing a forwardness that by no means indicates sound progress. Children who are constantly with their inferiors are liable to be overbearing, inso lent, unwilling to accord rights to their fellows, while they lose the advantage of being with a person of suffi-

cient education and position to add much to their ideas. 2nd. In order that the child may be placed where the

3rd. In order that the mother may be free to discharge those duties to her home which the training of her child would oblige her to neglect. The duties of mothers involve an immense responsibility, but still no mother is justified in neglecting the care of her home for the sake of her children, unless circumstances compel her to do so; and when children have attained their third year, no mother is qualified to carry on the teaching of her children as well as a person specially trained. The idea that mere maternity brings with it a fount of educational wisdom is a poetic fiction which every day's experience disproves.

Few things impress one more with Frobel's learning and educational skill than a comparison of the grada-tion of the so-called gifts and occupations with the requirements of mental science and physiology for human growth. At every lesson the child's perceptions are increased or strengthened by objective study and bodily exercises, or its memory and imagination are called into play by hearing stories and acting games, &c. The most watchful discipline should preside over manners and morals, and yet the whole Kindergarten tone should be full of the buoyant gaiety of play. You will observe, that the child, in using the toys, is enabled to consider the extension, and therefore the shape, of bodies from the very first, with all the precision attending a right understanding of points, lines, angles, &c., treated in a marvellously simple way. Since pure discrimination depends first on a clear recognition of the difference, and then on an equally clear perception of the similarities, between objects, we find Fröbel laying down his great law of contrasts and similarities, by which, when a child has studied one object, the teacher is directed to choose for the next lesson the greatest contrast possible, and then shew in succeeding stages the various forms which link the two. I here take the opportunity of shewing you specimens of the gifts which have been kindly lent by Messrs. A. N. Myers and Co., of Berners-street, to indicate, to those who may not have seen such specimens before, the provision made for a progressive and accurate study of form. They may be classified as :-

(A) Exercises with Solids.—These include the six "gift" boxes of Fröbel and clay work.

Box 1 contains six coloured woollen balls, with strings to match. Aim—to teach colour, the directions right and left, &c., and to exercise the body in various ways.

Box 2 contains a wooden ball, roller, and undivided cube. Aim—to teach form, pointing out likenesses and differences; to describe and count sides, corners, and edges; to show that qualities and motions vary with difference in shape; and to remark that the sphere is the only one of these objects which presents the same aspect from all sides.

Box 3 contains a cube formed of eight smaller cubes being halved across each of its faces. Aim—(in addition to other objects)—to teach number, including simple exercises in all the four rules, together with elementary ideas of a fraction.

N. B.—This will also be found useful in teaching fractions to classes in juvenile schools. Box 4 contains a cube in eight oblongs, being divided

Box 4 contains a cube in eight oblongs, being divided once perpendicularly, and twice horizontally. Aim—to advance upon former lessons, especially developing farther exercises in building and pattern forming. Box 5 contains a cube divided twice perpendicularly

Bex 5 contains a cube divided twice perpendicularly and twice horizontally, forming twenty-seven smaller cubes, of which three are halved diagonally into triangular prisms; while three are quartered diagonally into similar smaller prisms. Aim—to add the study

of oblique lines, obtuse and acute angles, to the form lessons; to increase the variety of the building exercises &c. N. B.—This box may be used with advantage in the juvenile schools, in lessons on square and cubic measures.

Box 6 contains a cube consisting of twenty-seven oblong blocks, of which six are halved across their breadth, and three along their length. Aim—to develope more building exercises and symmetrical forms. I have described these six "gifts" only at length, as being the most characteristic and essential to the system. Gift 7 is clay modelling. Aim—to call out the imitative

power of the child, and to exercise fancy.

[To be continued.]

Phonography.

2nd paper by WM. HY. TAYLOB, (erroneously printed M. H. Taylor in last number of J. of Ed. M. P. S and Teacher of Phonography).

To arrive at a just conclusion as to the real value of Phonography we must glance at the several systems employed before its invention, examine their defects, and how these defects have been remedied by Pitman.

We have said that the invention of movable types gave birth to stenography. This is true so far as stenography or shorthand writing, as an art, is concerned, because stenography as such, and reduced to a system, did not exist till then; although several of the ancients saw the utility of such a thing and endeavoured to find some means of taking notes of words as fast as the speaker could utter them. We know that Tyro, Cicero's freedman, took notes of his master's speeches : Octavius Augustus, and Titus Vespasian were expert at shorthand, and Plutarch tells us that the speech of Cato on Cataline's conspiracy was taken down in shorthand. But the characters used by these ancients could not be called stenography. They consisted merely of an abbreviated longhand interspersed with more or less of arbitrary characters. Tyro, however, succeeded in introducing his art into public schools, and it was made a regular branch of education for the higher classes. He had not to contend with the unphonetic spelling with which we have to be contend, as the Latin tongue was nearly phonetic in its formation, therefore any system founded upon it was less liable to opposition than any for the

English language in its present state. In 1588 Bright published a system of arbitrary characters for words, the first regular attempt to supersede the use of longhand, however abbreviated, by shorthand characters for the English language, but it was found so unsatisfactory that John Willis in 1602 formed a regular shorthand alphabet which, though it improved on Bright's, as it gave the student a basis on which to work, was still very incomplete. Mason, by experimenting on the works of his predecessors and adopting whatever he found useful in them, succeeded in maturing something more satisfactory, which he published in 1682. It was republished by Thomas Gurney in 1751 and is used by the members of the Gurney family as government reporters to the present day. Mavor's appeared in 1780, and Samuel Taylor published his in 1786. Mr. Isaac Pitman of Bath England, the Inventor of Phonography, endeavoured to improve upon Taylor's system by inserting long and short vowels, but found it almost impossible to make writing on such a principle sufficiently legible to meet the wants of the public.

He accordingly decided upon forming a new system

of his own, a step which required considerable courage, as Taylor's was so much superior to all others that it was considered by some impossible to improve upon or surpass it. The fact that it is still used by several eminent and practical men proves its great value.

If Mr. Pitman had not been convinced of the utter impossibility of writing as fast as a speaker could deliver to him, therefore 2 circles gave him but 4 curved signs, his words, and, at the same time, of preserving all or and only 4 straight lines that could be of any service,

Several professional reporters had endeavoured to elaborate more condensed forms than the straggling characters they had learned from the teachers of their day, to enable them to follow the speaker, but they failed through not studying carefully the movements of which the hand is most capable, and the simple forms obtainable from circles, dots and straight lines. They were thus confined to a small number of characters which bore no relationship one to the other, and therefore could not be reduced to any regular plan. It cer-tainly was not difficult to imagine certain signs which should represent certain words, but their multiplicity and the want of connection between them burdened the memory. It was also found that the more contracted they were made the more illegible they becames.

systems would still be encumbered with the erroneous orthography of the English language as now prevailing, struck out a new part altogether and brought to light *Phonography.* This invention has completely changed not only shorthand writing as a profession, but has in stenography are arranged without any regard to uniformity. In Taylor's alphabet is represented by an oblique looped stroke from left to right and p, its here sound by a looped perpendicular stroke; d an ver it has been established, as a means of correspon-dence; as by this easily acquired, perfectly reliable and legible method of writing, all those who use the perpendicular one, and so on for the other letters. There pen can write as much in one hour as can be done in is also the ambiguity arising out of the use of the same six by the use of long hand. It is used as a regular signs for f and v, for g hard and soft, while it must be means of correspondence by thousands. No arbitrary signs being used it is as legible as common print, and in common orthography are of no service whatever, can be read by all those who are proficient in the art worse again, notwithstanding that he tells us in his first much more rapidly than any long hand writing whatever. So much so is this the case, that, in England and the United States, it is used on all Railways, and in the principal commercial houses and law offices where an extensive correspondence is carried on ; and Phonographers obtain salaries of from 50 to 100 per cent more notice everything, the articulation sh, zh are composed

than those who have no knowledge of the art. We will compare Samuel Taylor's system of stenography with Phonography, Taylor's being in the opinion of most persons competent to judge of the matter, the best of the old systems. This will show the defects of principle at all, while all the combinations in phonothe former and how they have been provided for in the latter.

If we examine the alphabets we will find that Taylor's The examine the appliables we will find that raylor's consists of 19 consonants, or signs of consonants, to represent b, d, f or v, g or j, h, k or q, l, m, n, p, r, s, t, w, x, y, ch, sh, and th; that of Phonography consists of 24 simple consonants representing p. b; t, d; ch, j; k, g hard; f, v; th (*thin*), th (*them*); s, z; sh, zh; m, n. ing. l. r, w and h. This proves the richness of the Phonographic alphabet (the cause of its legibility) and Phonographic alphabet (the cause of its legibility), and the meagreness of stenographic characters, which pro-vide no means of distinguishing between hard and soft g in such words as gem and gift, between f and v, s and z,ch_{and j}, &c., although these articulations differ widely from each other. We also experience very great diffi-culty when we come to the vowels, which are not pro-vided for to any appreciable extent in stenography. What difficulties stenographers most have laboured under in trying to decipher the numerous monosyllables under in trying to decipher the numerous monosyllables | two oblique straight characters from left to right the

of the English language, spelled alike as far as conso-nants are concerned. How distinguish hate from hat? dean for den, pine from pin, pope from pop? Yet Taylor says that his system is so near perfection that he believes it almost impossible to better it. He could only find, (page 57 of his work,) 2 semi-circles per circle of any use any of the anomalies of the spelling of the English lan-guage at the present day we should never have been blessed with Phonography. will call No. 1) by both a perpendicular and an hori-zontal line, drawing from the circumference to the centre light and the remainder heavy, he would obtain 4 straight lines instead of two and 4 light curved lines; he then drew circle No. 2 in which he raised a square thus forming 4 other and different curves; he afterwards drew lines from each corner of his square, the first halves light and the remainder heavy as before, giving him 4 more straight lines. As all these curves may be made heavy he obtained eight heavy curves, forming in all 16 curved lines and eight straight lines ; showing that by a little ingenuity/24 consonant signs are obtainable from the most simple geometrical forms. As there are only 20 pure consonants required for writing English we have a redundancy where before there was a scarcity, and we have 4 extra signs for the representation of the Mr. Pitman finding that any *improvement* of the old most useful double consonants. Another most important borne in mind that the rules laid down for our guidance rule to write as pronounced, he makes the sign for k and q represent the words know, known, &c., where k is silent : where is the consistency ?

I will give but one more example of the arbitrary character of his signs, for it would be too tedious to s & j and z & j therefore the signs to represent them should partake of their forms. As it is impossible to it suffice to say that Taylor does not recognise this principle at all, while all the combinations in phonography are formed so as to show their relationship at a glance; this will be seen from the manner in which Mr. Pitman has arranged his curved and straight lines, which I will now endeavour to explain ; for that purpose let us go back to our circles and lines. It will be seen that they consist of 4 horizontal curves, 2 hori-zontal straight lines, 4 perpendicular curves and 2 per-pendicular straight lines, 2 curves and 2 straight oblique from left to right characters, and a like number of oblique curves and straight lines from right to left. By grouping the articulations of the English language we observe that there are 4 formed by the lips p. b, f & v : 6 by the teeth t. d. th (thin) th (them) s & z : 6 by

representatives of j & b and the two curves in the same direction f & v, the light lines for the sharp letters and the heavy ones for the vocalized ones, it & d are represented by the perpendicular straight lines ith & the by the perpendicular left hand curves and s & z by the right hand curves. Ch & j by the oblique from right to left straight lines ish & zhe (compounds of s & j, &c.) by the curves in the same direction 1 & r are represented by the Left and Right sides of the upper part of circle No. 1, r & g hard by the two horizontal straight lines and the upper curve of circle No. 2 is a mound and of it we make m, the under curve of the same is taken for n, we have thus separate signs for all the simple consonants and have not exhausted all our material, so to continue in a systematic manner heavy n will do for ing heavy m for mp or mb, heavy l, br : and heavy r, rch all very useful compounds.

The last thing I shall notice, as my limits in this article will not allow me to enlarge further, is the very simple, but very efficacious manner of representing the vowels. Taylor represents them all by a simple dot, leaving the reader to distinguish as best he may which is intended, but Mr. Pitman leaves us in ho doubt, and, moreover, so arranges them that skeleton or pure consonant writing, in his system, is more plain than can possibly be represented by Taylors with as many vowels inserted as is possible.

To sum up, suffice it to say that every simple consonant and several double ones in Phonography are made by a single stroke of the per while those of the best of the old systems require several strokes, that their alphabet is deficient while ours is superabundant : that vowels are almost denied a place in stenography so that such words as bowl, bell bill hat and hate cannot be distinguished in Taylor's system : in Pitman's there cannot possibly be any error, the conclusion is that Phonography contains the essentials of a perfect system of quick writing or stenography viz : brevity and legibility.

(to be continued.)

Methods of Teaching the Subject of Reading.

(A paper by S. P. Rowell of Ann St. School, Montreal.)

It must be borne in mind that each new method used, has been adopted, because of some advantage it was supposed to have over other methods; and that, in each case, being its adaptability for enabling the pupil to master words which he had never before seen, and giving him the power to overcome the many obstacles that lie before him.

I might say here, that the success of the method employed, be it what it may, will more depend on the merits of the teacher, than on the merits of the method used. The first thing in teaching reading is to notice the nature of the task. Have we to teach the child the words as spoken ? No he can talk and say any word in his book. He sees certain signs and characters on the page, but they convey nothing to his mind ; you pronounce the word which one of these signs or combinations of characters stands for, and the child will understand you at once; because he is familiar with it when spoken, and he makes common use of it.

Now the nature of the work is plainly to get the child to see that these signs, represent words which he knows quite well; and it is this power or ability of associating correctly and readily, words and their signs, that is to be imparted by the teacher.

done, is now for us to consider. There is first the Name Method or Alphabetic Method which I think is the most generally followed. It consists in first knowing the letters; and then in reading to name each letter of the word, which the teacher pronounces for the child to repeat. In this manner the word is regarded in parts, and not as a whole; and I think this is allowed to continue so long in some instances that the word is recognised by the ear becoming familiarized with a certain succession of sounds, rather than by the eye becoming familiar with a certain combination of cha racters; as for example it often happens: a child in reading comes to the word, your or have, ask him to say it without spelling it aloud, and he cannot make it out; then tell him to spell it aloud and he has no difficulty. I speak from experience as a teacher on this point ; and while I in the main approve of this method, at the same time I think it is often carried to excess by many who practise it, and the effect of this is bad, not only in the way just mentioned, but it is a lazy indolent practice if too long indulged in ; because no effort is made to master words and take them in as a whole at one glance. One of the best advantages to be observed is, that it teaches at the same time spelling, a very important consideration.

Another Method is the phonetic, which consists in teaching the powers of the letters, and from this to make out the word; but it seems to me to be a senseless operation, especially in the English Language where the same vowel has many different sounds. And its most peculiar charm being its supposed power to enable a child to master new words, which I much doubt; although it has been highly spoken of lately in the schools of Boston, New-York and St. Louis.

The Look-and-say Method consists in reading the words without spelling them, looking at the word as a whole and remembering the sound associated with it. There are good points in this method that would seem to commend it. The child is taught to master the word in nearly the same manner as he does the letter, and as it is familiarity with the words that is really needed, his whole time is not taken up by slowly repeating every letter and then having to be told in the end how to pronounce the word, and more time is gained for becoming practically acquainted with the words and the powers of the letters.

There is the method styled Phonetic Analysis, which is in many respects like the last mentioned. The teacher directs the child to observe how the sounds are produced, that is the motions of the organ of speech as far as possible, while the word is slowly pronounced the child pronounces it then, after which the word may be put on the blackboard and divided according to the sounds required for its pronunciation. But good pronunciation and distinct articulation are best secured by this method. I think it would be wrong for a teacher to adhere too strictly to any one of these methods, to the exclusion of the rest. But he must first study the children, and then frame his course accordingly. I think that children brought up in a well educated family; or children from a well read and intelligent community, need very little of the Phonetic Analysis to bring them along in distinct pronunciation and articulation, while those from the opposite classes need a great deal of it to overcome their slovenly, slurring, mumbling, manner of speaking.

My practice has been to allow the young children to use the Alphabetic Method for a short time; say, till they could call out quite rapidly the letters in the words, thus gaining the spelling of very many and the How this is best, most rapidly and most effectually ability to learn quictly the spelling of a few set words. which have occurred the most frequently, and all the which will always be to them nothing but an instrusmall words.

requires to correct the mumbling of words, and indis-tinct articulation, by resorting to the Phonetic Method; to give that power over the organs of speech which will finally overcome these difficulties.

Thus it may be noticed that three methods are partially used, (The Alphabetic the Look-and-say, and the Phonetic), and this has given me the best satisfaction in the end.

Now teachers of Primary Classes kindly allow me to say a word to you. Would you teach little children successfully and well, then I would say be thoroughly ALIVE to your work, active and stirring in your manner. lively and cheerful in your disposition, open and decided in your actions.

And as regards the teaching of reading especially, do not put the little ones to the far side of the class room, and then sit quietly down in your chair or on the top of one of the desks, and draw a long sigh, because one has lost his place, and as a punishment the next is told to read. But get near your class with a good chance of moving freely from one end of it to the other, and see that you do it. Do not leave unnoticed the one who reads first till his turn comes again; but make him a visit and different ones here and there to see if they are following those who read. Ask the class now and then to tell the reader what to call a word that he cannot make out; thus inciting all to follow on; and I can assure you, that you will be more than repaid in a short time by the progress made, and surprised to see how well children will read, and keep the place while others are doing so, in the space of two or three months. I put before you no far-fetched notions or theories but simply something that you may practise every day.

Female Accomplishments.

An accomplishment is, of course something accompleted woman. It is the undoubted duty of women to make themselves agreeable; and the wider the range of their accomplishments, the easier it is for them to shed a bland and genial influence over society. But to after having advanced a step further in life, call for the impose the same round of ornamental branches upon young girls in general, without regard to their natural taste and inclination, is a great mistake. Why should one who has no eye for either form or colour, be tied down, month after month, to the pencil and the palette ? What an enormous amount of time is wasted in labo rious beating of the piano keys by patient victims, who not having the slightest conception of the soul of music, can never be anything more than mechanical performers, no matter how thorough their instruction may be. It would be much better to furnish them with a respectable barrel organ, and let them grind away periodically at that. Where the musical gift has been implanted by nature, let it be thoroughly cultivated;

As soon as the letters are readily distinguished they but it is a pity that so many young girls should be should be asked to give, without spelling, the words fastened to an instrument four or five hours every day, nall words. This will teach them to look upon the word as a and it is presumed that almost every woman has a taste whole, and to remember the appearance of it. But allowing them to spell the new and more difficult words, which, in a well arranged series of lessons would soon in their turn become fairly familiar to the scholars who are then asked to say them without life. The instincts of their network and to say them without life. would soon in their turn become fairly familiar to the scholars, who are then asked to say them without spelling as before. Due care must be taken as occasion requires to correct the mumbling of words, and indis-wives and daughters are excluded. There is something touching and pathetic in some of the heirlooms, which show how they were wont to amuse them-selves in days gone by. On the walls of some remote upper chamber there hangs a quaint old sampler, covered all over with alphabets in every conceivable form of text, and in all varieties of colour, very much faded now, worked by Mary A. White 1810 in the 14th year of her age. By its side may be seen a funereal piece with a green willow, bearing a strong resemblance to an umbrella, hanging over a white shaft somewhat out of line, and supported on the sides by two marvellously carved female figures with a noble defiance of botany in the surrounding grass and flowers, and of the ordinary rules of perspective in the adjacent church. On the opposite wall, elaborate card-racks are suspended, made of varnished and guilded scollop-shells; and in the centre of the room stands a black table, adorned with little pictures of birds and burgs, and buildings and beasts, and anything else that happened to turn up in the pictorials of the day, arranged in rows and circles and squares and triangles, perhaps with a vase of artificial flowers on the top, more brilliant than nature, and a great deal stiffer. Among the works of a somewhat later generation we find marvellous specimens of what was significantly called crewel-work,—Rebecca at the Well, Queen Elizabeth and Sir Walter Raleigh, Washington and other designs which remind one very faintly of the Gobelin tapestries. A generation has not passed since Grecian paintings were all the rage, which either artist or white washer migt have executed with equal facility. Still later we had the costly aquarium, in which the fish were so apt to die, when the young lady, who ought to have watched over them, was absorbed in working delicately shaded slippers for large masculine feet. The matters of which we have spoken are, for the most part, accomplishments only in a lower sense of the term. Every young woman who An accomplishment is, of course something accomplished—that is completed or filled up, and the word is now popularly used to designate the more ornamental branches of education, as well as those refinements of taste and manner which pertain to a finished or completed woman. It is the undoubted duty of women to But the cultive is the second sec But the cultivation of the ornamental part of education will never of itself carry them successfully through the world. The trials and difficulties of their position, exercise of patience, selfcontrol, charity, and other virtues, which are impracticable or at least extremely arduous, where the heart has not been previously trained by self-denial. When young persons return to the parental roof after the completion of their education, they only pass to another sphere of duty, and of duty which requires greater resolution and selfcontrol than was necessary in the shades of literary retirement. They have now to apply the knowledge they possess to sustain a combat against the world, and to perform the part of usefulness which is assigned to them by Providence in their particular situation of life.

A. M., Teacher.

THE JOURNAL OF EDUCATION.

OUEBEC, SEPTEMBER, 1877.

Death of the Recorder of Quebec.

(From the Morning Chronicle of Sept., 11th) Before putting the Chronicle to press on Saturday morning, Before putting the curronicie to press on Saturday morning, we had only the bare time and space to announce the death of His Honor the Recorder of this city, Cyrille Delagrave, Esquire, Q. C. By the sad event, Quebec loses not only an esteemed and highly valuable public officer, but an upright and useful citizen, who had figured upon its arena in every position to which Providence allotted him in a manner alike honorable to him compared to be a supersonable to him compared to him the supersonable to him t himself, serviceable to his country, and beneficial to his fellow men. The lamented deccased was born in 1812 and was men. consequently in the 65th year of his age at the time of his desta. He was admitted to the Bar in 1838, practised his profession alone and subsequently in partuership with the late Judge Chabot, enjoying the confidence of a large clientele. He was Secretary in 1854 to the Commission named to carry out the provisions of the Act for the abolition of fendal rights in Lower Canada. In 1859, he was elevated to the position of one of the Commissioners and held it until the work of the Commission was brought to an end. He then returned to the commission his profession and, in 1865, was again appointed to an official position as Agent of the Government under the Seigniorial Acts. In 1872, he resigned this office, accepted that of Recorder of the City of Quebec offered him by the Chauveau Government, and died at his post as such. Without ambition, he once refused to accept a judgeship at Perce. As a lawyer, though of a retiring and unostentations disposition, he was appreciated for his soundness and acquirements, and, as a judge, he was painstaking and consciencious and humane. He always actively connected himself with the cause of education and was, at the time of his death, a member of the Council of Public Instruction, having been elected president of that body as re-organized in virtue of amended Act of 1869. We sincerely sympathize with his bereaved family.

The managers of Schools receiving aid from the funds for promoting Superior Education are notified of the contemplated special inspection of those institutions in the months of April and May (see, in another column, the abstract of Proceedings of the Protestant Committee of the Council of Public Instruction.)

Our readers will find in this number of the Journal, the Price List which has been adopted temporarily for the supply of Text-Books, &c., for the Protestant and English Schools, on requisition from the Department of Public Instruction, conformably to Sections 29 and 30 of 40 Victoria, chapter 22, Quebec Statutes. For the Regulations referred to in Section 31 of the same Act, see Journal of Education for May and June, 1877, pages 91 and 92. No pains have been spared to render this list as complete as, it is possible to make it without deferring to next year the initiation of the system prescribed by the new Law; and, in respect of the prices annexed to the titles of the works, every endeavour has been made to ensure the obtaining of them by School Boards, parents, and guardians, at the lowest possible expense, so as to obviate the necessity for any teacher or scholar at a public School to be without the class-books, &c., which may be indispensably requisite. In thus consulting the interests of the great mass of our or School Trustees employing his or her services, nor

community, it is hoped that before long the contemplated advantages of the Law will be practically felt and recognized by those chiefly concerned in its operation, and that one important result will be reached in securing the uniformity in text-books prescribed by the Council of Public Instruction.

Due notice will be given of changes that may occur in the prices, and of additions that may hereafter be made to the list.

We had intended, in this issue, to offer some observations relative to certain modes of remunerating the services of teachers, which are still practised occasionally in our rural School Municipalities, and which all friends of Education would wish to disappear from our School System. Amongst them is that commonly styled " boarding round ", always coupled with an exceedingly low salary, not always paid in cash. Facts which have recently been brought under notice make it necessary for us to repeat that the Department of Public Instruction has never countenanced the practices alluded to; but want of space obliges us to reserve those observations for a future number of the Journal.

Provincial Association of Protestant Teachers.

The Annual Convention of this body is appointed to be held at the City of Sherbrooke on the 11th, 12th and 13th of September. For some time past, Mr. Secretary Hicks and the Council of Management have been actively occupied in making the preliminary arrangements. and the worthy President, for the year, R. W. Heneker, Esg., has returned from his trip to Europe, so that there is every prospect that there will be an agreeable as well as a useful reunion of the friends of Protestant Education, provided the Teachers generally make a point of availing themselves of the opportunities afforded by the occasion. We are informed that the presence of leading promoters of Education is expected, and, doubtless, the printed reports of the proceedings will, as usual, be perused with interest and attention by many others possessing the influence and the power to further the advancement of the good cause, but who may be prevented by circumstances from attending personally. It is therefore highly desirable that the gathering of teachers should be as strong as possible in respect of numbers, both for the purpose of profiting as widely as possible by the discussions that may take place upon matters connected with the practice of their profession, and by the mutual interchange of views and of experience, as well as to make the greater impression upon the minds of all whose encouragement and co-operation they themselves are much concerned in retaining. No teacher wishing to attend the meeting can be lawfully refused the opportunity by the School Commissioners is any teacher bound to make good in the school-room the time occupied in attendance upon such convention. In fact, the School Boards, in their own interest, should not wait to be asked for the necessary holiday. On the contrary, it would seem to be their duty, as well as their interest, to require their teachers to attend, seeing that those whom they employ cannot fail to return to their work with an increased value added to their services. Acting under that conviction, the Quebec Protestant School Commissioners are accustomed to expect all their teachers to attend these annual conven tions, and also to defray their travelling expenses; and we believe that the corresponding Montreal Board acts in like manner.

We understand, that, as usual, the Railroad Companies will grant facilities for attending the Sherbrooke meeting by reducing their ordinary fares ; while, undoubtedly the well known hospitality of the people of Sherbrooke and its environs will be generously extended, and enable the teachers during the holding of the Convention to avoid the other causes of expense.

We trust that the meeting will be numerously attended, especially by teachers, and that the members of School Boards, in view of the importance of the occasion to the instructors they employ, and to themselves, as well as in the interest of Protestant Education in the Province, will cooperate in making this Arnual Convention a successful one ; and, to ensure this, one thing do be done is to follow the above cited example of the Protestant School Commissioners of Quebec.

OFFICIAL NOTICES.



Department of Public Instruction.

APPOINTMENTS.

SCHOOL COMMISSIONERS AND TRUSTEES,

SCHOOL COMMISSIONERS.

His Excellency the Lieutenant-Governor has been pleased by order in Council, dated the 27th June last, (1877) to make the following nominations of school commissioners, to wit : City of Montreal, catholics.—P. S. Murphy, esq., vice himself Protestants.—The Revd. John Frederic Stevenson, L. L. B., vice the Bound Dr. Bannard, whose town of Alice has appind

Protestants.—The Revd. John Frederic Stevenson, L. L. B., vice the Revd. Dr. Bancroft, whose term of Office has expired. City of Quebec, catholics.—The Revd. Mr. Joseph Auclair, vice himself. Protestants.—William Walker esq. vice himself. County of Richmond, Saint-George de Windsor.—Mr. Alexis Beauchène, vice Mr. Pierre Bolduc, who has definitively left the municipality and whose place has not been filled by election. County of Rimouski, Sainte Angèle de Mérici.—Mr. Louis Fran-ceur. vice Mr. Nazaire Chouinard. deceased and whose place has

cœur, vice Mr. Nazaire Chouinard, deceased and whose place has not been filled by election.

County of Rimouski, Saint-Valerien .- Messrs. Anselme Goudreau, Octave Beaupré, Fabien St. Pierre, Anselme Vaillancourt and Joseph **Ouellet**.

By order in council, dated the 7th of September instant 1877. :

Bellechasse, Saint Cajetan.—Messrs. Anselme Lacroix and Narcisse Gagnon, vice Messrs. Pierre Pouliot and Michel Roy.

Bonaventure, Matapédiac.-Mr. William Robertson, vice Mr.

- Nathaniel Modess. Gaspé, Anse à Valeau.—Messrs. Hyacinthe Boulet, Aubin Tapp, Zéphirin Bonet, George Gauthier and William Henley. Kamouraska, Sainte: Hélène.—Mr. Michel Morin, vice Mr.
- Evariste Michaud.

Kamouraska, Sainte Bleuthère. - Messrs. Thomas Desjardins and Ignace Nadeau, vice Mr. Eusrbe Sirois and Joseph Lebel.

Montcalm, Saint Alphonse de Liguori,-Mr. Simon Richard, vice Mr. Sévère Dugas.

Montmorency, Saint Pierre.-Mr. François Paradis, vice Mr. Ignace Goulet.

Ottawa, Saint Ange Gardien .- Mr. Michel Nadon, continued in office.

Richelieu, Sorel, (parish).—Messrs. Clément. Cournoyer and Paul Cournoyer, vice Mr. Paul Milette and Michel Chalifoux. Richemond, Windsor Mills. — Mr. Ralph Taviss, vice Mr. E.

McCully.

Richemond, Windsor (township) .- Mr. Dunsan Hutton, vice Mr. James Shanks

Rimouski, Notre-Dame du Sacré-Cœur.—Mr François Drapeau, vice the Revd Mr. Charles Guay. Témiscouata, Saint François Xavier de Vigor.—Messrs. Michel

Moreau and Télesphore Dion, the election having been presided over by a person who could not sign.

Yamaska, Saint Bonaveuture .---The Revd Mr. A. Lamy and Mr. Edouard Salvas, vice Messrs. A. Desaulniers and C. Tessier. Yamaska, St. François du Lac.-Messrs. Puscal Dauplaise and

Jérémie Cartier, vice Messrs. Guillaume Dauplaise and Narcisse Antothe.

Arthabaska, Chester East.-Mr. Antoine Lafleur who was elected last year, but whose election having been contested he confessed judgment and has not been replaced yet. Richelieu, Saint Roch. — Mr. Pascal Haller, rice Mr. Joseph

Langevin.

Rimouski, Dalibaire.-Messrs. Eusèbe St. Pierre and William Brousset, vice Messrs. Severin Verreault and Xavier Xemieux.

Drummond, West Wickham .- Mr. Patrick Timmens, vice Mr. Thomas Torney, deceased. Montmagny, Village of Montmagny.-Messrs. François Xavier

Montmagny, Village of Montmagny.—Messrs. François Xavier Gendreau and Edouard Lemieux, vice themselves. Ottawa, Lowe.—Messrs. John Cuddy, jr., and Richard Daily, vice

Messrs. John Hogan and Martin Gannon.

Saguenay, Rivière Sainte Marguerite.-Messrs. Pierre Gauthier, William Gravel, Siméon Dufour, John Gauthier and Janvier Gravel.

SCHOOL TRUSTEES.

By order in Council, dated the 10th of September last, 1877. Bagot, Saint Theodore of Acton.—Mr. François Guertin, vice Mr. Pierre Bouchard.

Hochelaga, Cote Saint Paul.-Messrs. Horatio Jackson, Truman Sanders and Charles N. Halings, New municipality.

Jacques Cartier, Saint Laurent .- Mr. John Davidson, vice Mr. James Dodge.

Brome, Sutton.—Mr. Jean Huar, vice Mr. Siméon Bessette. Compton, Winslow South.—Mr. Joseph Bourque vice Mr. Exilia Bergeron, and Mr. Luc Béliveau, vice Mr. Gédéon Champoux. Hochelaga, Coteau Saint Louis.—Messrs. Adam Higgins and Thomas

Wiseman, no election having been made within the time required by law.

Quebec, Saint Roch North .- Mr. Edward William Holmes, vice Mr. McNamara.

Shefford, Roxton (township) .- Mr. Lewis Warren, and vice himself.

ERECTION OF SCHOOL MUNICIPALITY.

His Excellency the Lieutenant-Governor has been pleased by order in council, dated the 27th of June last (1877), and in virtue of the powers conferred on him by the 30th clause of chap. 15 of the Consolidated Statutes of Lower Canada.

To erect into a school municipality under the name of Saint Joseph d'Alma, the mission of the same name, in the county of Chicoutimi, with the following territory to wit: the seventh, eighth and inth ranges of the township of Signay, and that part of the fourth, fifth and sixth ranges of the same township, lying between let No thisteen inclusively and let No. lot No. thirteen inclusively, and lot No. twenty live, also inclusively, the whole of the range Saguenay of township of Labarre; the north part of the fourth, fifth and sixth ranges of the said township, from

No. seven inclusively and all the Island of Alma. 2. To annex the lands and properties of Louis Hubert and Pierre Bonville, both cultivators, of Sainte Marie, county of Beauce, to the municipality of Sainte Marguerite, county of Dorchester.

3. To erect into a school municipality under the name of Saint Télesphore de Montjoy, in the county of Soulanges, the parish of the same name, in the same county, comprising the following territory, to wit: 1. The whole of the concession Saint André on both sides, the palance of \$5,000 for University Education, be added to the general fund for Superior Education." to wit: 1. The whole of the concession Saint Andre on both sides, comprising the *Gore du Seigneur* and the concession of Saint Patrick; 2. The whole of the concession Saint George, the concession Saint Catherine on boto sides, from No. one hundred and nineteen to No. one hundred twenty three inclusively now occupied by Jos. Garand and Xavier Hurleau; 3. The two concessions called *des Anges*; 4. All the west part of the concession Saint Antoine.

Ilis Excellency the Lieutenant Governor has been pleased by order in council, dated the 27th of June last (1875), and in virtue of the powers conferred on him by the 104th clause of chap. 15 of the Consolidated Statutes of Lower Canada, to appoint the Reverend M. Archibald Campbell Scarth, M. A., of Lennoxville, county of Compton, as member of the Examining board of Sherbrooke.

By order in conncil, dated the 28th of July last, 1877 : County of Charlevoix.—The locality known as the "Village de la

Pointe au Pic," such as crected for municipal purposes by chapter 46 of the 40th Victoria.

County of Rimouski.—Township Duquesne, under the name of "Saint Valerien," with the same limits as those assigned to the said township.

By order in Council, dated the 14th of August instant, 1877 :

By order in Council, dated the 14th of August instant, 1877 : To erect into a school municipality the new parish of Sainte Marie Magdeleine, partiy in the county of Saint Hyacinthe and partly in the county of Rouville, such as civilly erected in the Lieutenant-Governor's Proclamation, dated the fifteenth day of May last, (1877). To change the name of the municipality of Rustico, in the county of Bonaventure, to that of Saint Alexis de Matapedia, and to assign to it the following limits, to wit: bounded on the west by lot number thirty seven of the second range from the River Ristigouche, lots number thirty four of the third and fourth ranges, continuing in a straight line to the limit of the township of Matapedia, on the north west by the limits of the said township, to the east by the same south first range, and on the north by the river Matapedia. To comprise within the limits assigned to the school municipality

To comprise within the limits assigned to the school municipality of Notre Dame des Sept Douleurs, in the county of Temiscouata, by Proclamation of the nineteenth day of September last 1876, those of the whole parlsh, such as civilly erected by Proclamation, dated the eighteenth day of November, one thousand eight hundred and seventy four.

Abstract of Minutes of Proceedings of the Pro-testant Committee at a meeting held on Wednesday, August 29th, 1877.

Present : Hon. G. IRVINE, chairman, Hon. G. OUINET, Superintendent of Public Instruction, Rev. DR. COOK, HON, JAS. FERRIER, DR. DAWSON, F. R. S., W. W. LYNCH, Eso., M. P. P., and HENRY FRY, Eso.

The minutes of former meeting having been read, communications and papers were laid before the committee, including, a letter from the Rev. J. Foster rela-tive to a grant for Compton Ladies' College; a petition from the School Commissioners of St. Gabriel de Valcartier West; receipts, report, and suggestions, from the Joint-Committee on Examination Papers, and from Dr. Cornish relative to Examination of Candidates for Diplomas; a receipt from the Treasurer of Compton Ladies College, and a communication from the Department of Public Instruction concerning a sum of money which had been placed at the Committee's disposal.

Resolutions were adopted-requesting the Superintendent to procure a change in the times of meeting of the Boards of Examiners; amending the regulations for examination of candidates for Teachers' Diplomas; returning the thanks of the committee to members of Boards of Examiners who had cordially and efficiently acted in the preparation of examination papers; and deferring to a future meeting the consideration of an application from the McGill Normal School.

to the general fund for Superior Education."

The committee then proceeded to adopt recommendations concerning the distribution of the money derived from the Superior Education Fund, Marriage License Fund, and the Legislative appropriation in favour of the High Schools of Québec and Montreal, among the Institutions in the following list :

UNIVERSITIES.

McGill College, Montreal; Bishop's College, Lenuoxville.

AFFILIATED TO UNIVERSITIES.

Morrin College, Quebec, affiliated to McGill University.

HIGH SCHOOLS AND COLLEGES.

High School, Quebec; High School, Montreal; Ladies' Wesleyan College, Stanstead; St. Francis College, Richmond; Lachute College, Argenteuil; Compton Ladies' College, Compton.

ACADEMIES.

1st Class. - Huntingdon, Huntingdon; Sherbrooke, Sherbrooke.

2nd Class.—Bedford, Missisquoi; Coaticook, Stanstead; Granby, Shefford; Knowlton, Brome; Lacolle, St John; Waterloo, Shefford.

3rd Class.—Barnston, Stanstead ; Charleston, Stans-tead ; Clarenceville, Missisquoi ; Clarendon, Pontiac ; Compton, Compton ; Cookshire, Compton ; Dunham, Missisquoi; Frelighsburg, Missisquoi; Stanbridge, Missisquoi; Sutton, Brome; Berthier, Berthier.

4th Class.—Cowansville (girls), Missisquoi ; Cowans ville, Missisquoi ; Danville, Richmond ; Eaton, Comp-ton ; Mansonville, Brome ; Philipsburg, Missisquoi.

5th Class.-Ste. Foye, Quebec ; Sorel, Richelieu.

MODEL SCHOOLS.

Durham, Drummond; Lapesche, Ottawa; Leeds, Megantic; Maple Grove, Megantic; Magog, Stanstead, Marbleton, Wolfe; City of Hull, Ottawa; Rawdon, Montcalm; St. Dunstan, Quebec; St. Henri, Hochelaga; Three Rivers, St. Maurice ; Valleyfield, Beauharnois ; Waterloo, Shefford ; Grenville (Ladies'), Argenteuil.

In view of establishing a fair and impartial division of the funds for promoting Superior Education and the necessity, for that purpose, of having the Academies and Model Schools carefully inspected, it was moved and resolved "That Mr. Emberson and Mr. Weir be instructed to inspect the Academies and Model Schools -Mr. Emberson to take the Western and Mr. Weir the Eastern Schools, dividing them as shall be most expe-dient to themselves....... The inspection to be made in the months of April and May and returns to be given in before the August Meeting of the Committee, and in conformity with the instructions of the Board : Notice to be given to these schools of the contemplated inspection.'

(Extra remuneration for these Special Inspectors to be provided from the additional Legislative appropriation of last session.)

These Inspectors to receive, as remuneration for their services in this special work, a certain fixed sum, each taken from the appropriation for Inspection made by the Legislature at its last session.

The Committee, on this its first meeting after the lamented decease of the Hon. Mr. Justice Sanborn, desired to record their concurrence in the general regret On the subject of the Marriage License Fund, amount- for the loss of one so justly and so highly estecmedand, particularly, their sense of the special loss sustained by themselves by the death of a Member of the Committee, distinguished for his zeal and judgement in the cause of Education, and for his acquaintance with the educational wants of the Province.

The meeting then adjourned.

Amended Regulations relative to the Examinations of Candidates for Teachers' Diplomas. (')

"1. Article V of the Regulations to be amended as follows :

" Candidates shall be examined by written or printed " papers on every subject, except Dictation, Reading, and "Mental Arithmetic, with additional oral examination in " such subjects as may require it, and the work shall be so arranged that the oral examinations shall be "going on simultaneously with the writing of answers " to the Papers.

"2. Articles VII & VIII shall be considered as modified by the change of Article V, and the Book to be used for Reading and Dictation shall be some ordinary " school text-book at the discretion of the Examiners.

"3. The Examination Papers shall be prepared by a "Joint-Committee, of which the Examiners of Montreal and Quebec shall appoint each two members, and those of Sherbrooke and Three Rivers each one, with " the Secretary of the Protestant Committee, who shall " act as Convener and Secretary, and the questions shall " be circulated under seal to the different Boards to be " opened by them on the days fixed for Examination " and in the presence of the Candidates. The answers " shall be read and decided on by the Local Boards, "and sent to the Secretary of the Joint-Committee, who "shall report thereon to the Committee of Council, "three members of the Committee to be a quorum.

"4. The place for the holding of the meetings of " Examiners shall be fixed by themselves; but shall be "as central as possible; shall be, if possible, an educa-"tional building; and, in no case where this can be "avoided, a hotel or tavern.

" 5. Every candidate for examination for an Elemen-" tary or Model School Diploma shall pay, before the "examination, to the Secretary of the Examiners, in addition to his fee of \$1, the sum of \$2; and every candidate for an Academy Diploma \$4. These sums shall constitute a fund for paying the necessary expenses of the Boards of Examiners. The fees of the "unsuccessfal candidates shall not be returned but " unsuccessfal candidates shall not be returned, but " they may come up a second time at a subsequent " meeting of the Examiners without further fee.

"6. The Schedule of Subjects for Examination shall be as follows :

1. PRELIMINARY.

"All candidates for any grade of Diplomas must pass in the following subjects :---

	Marks.
1. English Dictation (including Hand-Writing)	50
2. English Reading.	50
3. English Grammar	50
4. Arithmetic (ordinary rules)	50
o. Geography (4 Continents and British North	00
America)	50
6. Sacred History (An Epitome of the Old Testa-	
ment and one of the Gospels)	50
	-

- " No candidate shall pass unless he shall have obtained
- (*) See page 92 of the Journal of Education for May and June, 1877.

- " one third of the Marks in each of the above, except "Dictation and Reading in which two-thirds shall be required.
- "Candidates for any Diploma, who have already " passed in these subjects, may be exempted from further " examination in them."

2. SPECIAL.

(a) Elementary Diploma.

1. Art of Teaching as in Abbot's Teacher and Morrison's Art of Teaching...... 100

- History of England and of Canada...... 100
 French, Dictation, Grammar and Reading. in

the case of those who desire a certificate in that language..... 100

"Candidates must take at least two-thirds of the Marks to pass for a first class and at least one third for a second class Diploma. Candidates in French " taking two-thirds of the Marks shall be entitled to " special mention of the subject in the Diploma.

(b) Model School Diploma.

		Marks.
1.	English composition (a short Essay)	. 100
2.	Advanced Arithmetic & Mensuration	. 100
3.	Geometry, Euclid, Books I II III	. 100
4.	Algebra including Simple Equations	. 100
+5.	French, Dictation, Grammar and Reading.	. 100
+5.	History of England and of Canada	. 100
+ 7.	Art of Teaching, as above	. 100
8.	Book-keeping, Use of the Globes, or Linea.	r
	Drowing	400

Drawing...... 100

"Candidates must obtain least one third of the marks "in each Subject. If only partially successful they "may be awarded Elementary Diplomas.

(c) Academy Diploma.

1. Greek, Xenophon, Anabasis Book I and

- Grammar..... 100
- 2. Latin Cæsar, Bel. Gal. Book I and Grammar.. 100
- 3. French, Grammar, Reading and Composition. 100 4. Euclid, Book I, II, III, IV and VI...... 100

- Scientific Agriculture..... 100
- +7. Art of Teaching...... 100

"Candidates must obtain at least one-Third of the marks in each subject.

" Teachers of French Schools may be examined in French, instead of English.

" No teacher shall receive a Diploma of the first class " for a Model School or Academy unless he shall have " obtained two-thirds of the total number of marks in " the special examination for the Diploma.

REGULATIONS FOR DIPLOMA EXAMINATIONS:

1. The Examination-papers to be forwarded by the Secretary to the Presidents of the Boards.

2. At the meetings of the several Boards, on the morning of the Examination, the President or Chairman of the meeting, to open the Papers, and cause them to be distributed to the candidates.

3. If no candidate for any Diploma, the Papers set for that Diploma to be returned unopened to the Secretary,

† As in Elementary Examination.

Marks.

SEPTEMBER, 1877.]

4. The times and places of meeting of t	he several	7. HISTORY.
boards for holding the Examinations to be	advertised	Freeman's Outlines of History
y the Secretary of each Board.	la her tha	Collier's British History Miles's "Child's History of Canada."
5. No omissions or alterations to be mad examiners in any of the questions printed.	ie ny the	do School History of Canada
6. The examiners to take due care in the	nlacing of	Hodgin's School History of Canada
andidates, &c., to prevent copying or com		Collier's Great Events of History
f any kind.		8. ALGEBRA, GEOMETRY, &c.
7. Pens, ink and paper to be provided for e	ach candi-	Todhunter's Algebra
ate, and no other paper than that provi-	ded to be	Hensman's do
llowed to be used.		Euclid.
8. Writing to be on one side of the paper o	nly.	Young's First Book of Euclid Greenleaf's Elementary Algebra
·		do Higher Algebra
Price List.		Galbraith & Houghton's Trigonemetry Greenleaf's Elements of Trigonometry
Comporary Supplement to the list of authorized Text-Book use of Protestant and English Schools in the Province of		Chambers's Practical Mathomatics
Journal of Education for May and June, 1877, p. 88.)		Bryce's First Latin Book
1. ENGLISH READERS :	_	do Latin Grammar
The Canadian National series, viz :		do Imitative Exercises
) First book of Reading Lessons, with 31 Illus-	• • • • • •	Arnold's First and Second Readers do Composition
trations irst Book of Reading Lessons, 2nd part, 54 Illus-	\$ 0 45 doz.	Smith's Elementary Grammar
trations	0.90	do Exercises
econd Book of Reading Lessons, 50 Illustrations.	2 25	do Latin Grammar
hird Book of Reading Lessons, 41 Illustrations ourth Book of Reading Lessons, 45 Illustrations.	3 50 4 50	do Advanced Exercises
ifth Book of Reading Lessons, 50 Illustrations	4 50 5 40	10. GREEK.
he Advanced Book of Reading Lessons	5 40	do Second do
Nelson Leries, No. 3\$1.45 per doz.; No. 4\$2.42;		Arnold's Readers
o. 5.— \$3 .63 ; No. 6.— \$4 .30 ; No. 7.— \$ 7.26 ; No. 8.— 7.26 ; No. 9.— \$4 .30 ; No. 10.— \$ 5.64.		do Composition
Constable's Series, Primer-\$0.48 per doz.; 1st		11. ENGLISH LITERATURE.
0.96; 2nd\$1.50; 3rd\$2.10; 4th3.00; 5th		Seeley's English Classics
4.25 ; 6th.—\$5.25 ; Advanced.—12.08. Royal Series, No. 1.—\$0.70 per doz. ; No. 2.—\$1.66 ;		Chambers's do
equel, \$2.15; No. 3\$2.65; No. 4\$3.15; No. 5.		Trench's Study of Words do English, Past and Present
-\$5.60 ; No. 6.—\$6,82.		Hales' Longer English Poems
ndrew's Dramatic Readerorthwick's British American Reader	7 25	Language Primers (MacMillan)
	•••••	12. FRENCH.
2. ENGLISH SPELLING. he Canadian Spelling Book	2 70	Duval's Juvenile Course
Iorell's Manual	2 70 2 36	do Elementary Grammar do Lectures Choises
ational Spelling Blanks	1 06	do Lectures Choisies Darey's Dominion Phrase Book
3. WRITING.		do Lectures Francaises
Payson, Dunton and Scribner's Series, English Edi-		De Fiva's Elementary Reader
on of larger\$7.00 per gross ; American of larger		Larousse, Cours de première année do do de seconde année
11.20; Smaller,—\$10.20.	9 60	Beauvoisin's Anecdotes
he Spencerian system of Penmanship	8 60 gross	Bonnefon's Ecrivains Célèbres
4. ARITHMETIC.	0.15.1	Edinburgh High School French Grammar, by Chas. Schneider
mith and McMurchy's Elementary Arithmetic do Advanced do	2 15 doz. 4 3 0	13. SCIENCE, &c.
angster's Elementary Arithmetic	2 15	, , , , , , , , , , , , , , , , , , , ,
do Advanced do	4 80	Cutter's Text Book of Physiology Gray's "How Plants Grow."
Cichardson's Canadian do	2 40	do First Lessons in Botany
	MON	Science Primers of Chemistry, Physics, Geology, &c.
5. ENGLISH GRAMMAR AND COMPOSIT		Dana's First Book of Geology Dawson's Lessons in Scientific Agriculture
Iorrison's Grammar ain's First English Grammar	4 03 doz. 4 36	do Handbook of Zoology
atterson's Composition Book		Brunet's Eléments de Botanique
winton's School Composition	4 85	Houghton's Mechanics do Astronomy
algleish's Outlines of Composition arker's Exercises	$\begin{array}{c}1 50\\11 60\end{array}$	do Hydrostatics
ennie's English Grammar	1 00	14. BOOK-KEEPING.
ullion's do	5 20	Johnson's Book keeping
6. GEOGRAPHY.		Payson, Dunton & Scribner's (do)
lodgin's Easy Lessons (Lovell)	4 30 doz.	
do General Geography, (do)	8 60	Canadian Three Part Songs
ampbell's Geography alkin's Elementary Geography	680 620	Le Trésor du Jeune Chanteur Chrétien
	11 201	
do Advanced do	15 <u>5</u> 0	16. MAPS.

141

5 44 doz.

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6 75 doz.

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13 20 doz.

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3 25 doz.

2 75 doz.

3 50 each

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7 00 doz.

doz.

9 70 doz.

5 65 doz.

17. DRAWING.

Walter Smith's Freehand Drawing	••••••	1
Vere Foster'sSeries of Drawing Books	••••••	1
		1

18. ART OF TEACHING.

Abbott's Teacher	18	00	doz
Morrison's Art of Teaching	13	50	
Embersen's Art-of Teaching	4	36	
Antibolised a vite of a cuching	т	00	

N. B.—The Prices.given in this List include paoking, dispatch by the Montreal departmental agents, Messrs. Dawson Brothers, delivery, and freight, free of charge, to any steamer's port, or railroad station, in the Province of Quebec.

It will be understood, however, that when publishers' present prices (on which the quotations in this list are based) are changed as in the case of new editions-there will be a proportional increase or diminution in the figures now given. For forms of application or requisition see those given below.

Forms of Application or Requisition for Books, &c., from the Department of Public Instruction.

(PLACE AND DATE.)

To the Superintendent of Public Instruction.

Sir,

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· ·	
The School Commissioners (or School Trustees) of the	
Municipality of	
at a regular mosting hald on the	
of	
use of the schools under their control, the following :	4

(LIST OF THE ARTICLES.)

Enclosed is the amount required for payment of the same.

Or (Please retain the amount from the annual grant to our Municipality.)

Address.....

Or (The bearer is authorized to pay for and receive the books, &c-, ordered.)

.....Chairman.

.....Sec.-Treasurer. (Seal of the School Municipality,

if there be one.)

(Signed),

School Necessaries (French List.)

To be had at the Book Depository in connection with the Department of Public Instruction.

1. Livres de lecture graduée, by A. N. MONTPETIT :

	zieros de vecture grunder) - j i enterna	-	
	1st book	doz.	\$1.20
	2nd "	"	1.80
	3rd "	"	2.40
2.	Slates	"	1.20
"	· · · · · · · · · · · · · · · · · · ·	"	1.40
3.	Slate pencels	"	0.12
4.	<i>a a a a a a a a a a</i>	"	0.05
5.	Petit Manuel d'Agriculture by LARUE, boards	"	1.10
	Petit Catéchisme	"	0.50
7.	Grand Catéchisme	"'	1.50
"	" boards	"	2.00
8.	Syllabaire des écoles	"	0.40
9.	Nouveau traité du devoir chrétien	"	2.40
10.	Grammaire française de Lhomond, revised by N.		
	LACASSE	"	1.00
11.	Exercices orthographiques en rapport avec cette		
	grammaire	"	1.25
12	Grammaire française élémentaire à l'usage des		
	écoles chrétiennes	" "	2.0)
13.	Exercices ortographiques en rapport avec cette		
	grammaire	"	2.50
14.	Abregé de la grammaire de l'académie, by BONNEAU.	"	1,50

19.	Abrégé des exercices mis en rapport avec cette gram-		
	maire	"	1.50
	La grammaire de l'Académie by BONNEAU & LAUDAN.	"	2.70
17.	Exercices français, by BONNHAU & LUCAN	"	2,7 0
18.	Traité élémentaire d'arithmétique, by L. H. BELLE.	"	0 50
19.	Petit abrégé de géographie, by Toussaint	"	2.50 1.40
"	Idem translated by a lady of the Ursulines	"	1.50
"	Géographie moderne by Toussaint	"	3.25
2).	Histoire Sainte, by DRIOUX	"	2.25
21.	" Ancienne "	11	3.25
22.	" Ecclésiastique "	"	2,25
23.	" de France " " d'Angleterre "	1 1 11	3.25
24. 26.	Teachers' Manual for Freehand Drawing in prim-	••	3.75
20.	ary schools, by WALTER SMITH		0.75
27.	American drawing cards		0,30
	Manuel de dessin industriel à l'usage des maîtres		
	d'écoles primaires, d'après la méthode de Walter		
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JU.	Cartes-modèles à l'usage des élèves, en rapport avec co Manuel		0 25
31.	Tenue des liores, by N. LAUASSE.	doz.	5.30
32,	Traite d analyse grammaticale, by N. LACASSE	"	2.75
33.	Traité d'arithmétique, by Bouthillier	"	3.00
34.	Dictionnaire classique de Bénard	"	7.60
35.	Nouvelle methode de lecture, by JUNNAU		
30.	A New History of Canada, by DR. MILES	"	9
38.	A School History of Canada, "		See nglish
39.	Histoire du Canada, pour les enfants, by Dr.		List.
•	MILES, translated by L. DEVISME		
40.	Richardson's Arithmetic	"	2.20
41.	Commercial Arithmetic by the Brothers of the		
10	Christian Schools.	" -	See
42,	Lovell's General Geography	F	nglish
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44.	Corrigé des exercices orthographiques, by LAOASSE.	"	0.45
45.	Grammaire, by J. B. CLOUTIER	"	1.00
40.	Devorrs grammaticaux	"	1.75
47.	Le livre des enfants ou méthode rationnelle de lec.		•- •
10	ture d'après la méthode phonique	"	0.36
40.	Arithmétique élémentaire, by Toussaint.	66	2.10
10.	Arithmétique complète comprenant un Toise et un tralité d'Alashme by Torressium	"	3.75
50,	tralté d'Algèbre, by TOUSSLINT Histoire du Canada, 2e édition avec questionnaire,		0.10
	by Toussaint	"	1.50
51.	Cours de lecture à haute voix, by l'abbé LAGACÉ	••	
"	a de la compositione de la compo	"	2.75
	Idem, à l'usage des écoles normales et pensionnats.	" "	6.50
52	Idem, à l'usage des écoles normales et pensionnats. Abrégé de l'histoire du Canada, by GARNEAU	66 66 66	6.59 2 00
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MISCELLANY.

Westminster Abbey.

Westminster Abbey of to-day looks on the England of the nineteenth century, which she nursed in the eleventh, and guided and guarded through all the tempestuous experience of the turbulent youth-time that intervened before years brought experience, and experience direction and self-control. It has seen England successively Saxon, Norman and English. It has seen it Roman Catholic, Protestant, Roman Catholic, and Protestant again. It has seen an absolute monarchy, a constitutional monarchy, a republic, and a monarchy again. Within its walls mass has been chanted and the Anglican service has been read, and under its roof the Westminster Assembly's Confession of Faith was organized, and from thence was published. It lived through the wars of Normans and Saxons, welcomed William the Conqueror, welcomed the alternate despotism and abject submission of John, saw the Magna Charta wrested from his unwilling hands, beheld the land ravaged with the long wars of the rival roses, barely escaped demolition in the hideous but fruitful reign of escaped demolition in the hideous but fruitful reign of Henry VIII, was reclothed with honor in the more hideous and barren reign of Queen Mary, rejoiced in the proceeding of a new star appeared in the constellation the peaceful and benignant reign of the unscrupulous but sagacious Queen Bess, witnessed the conflict between constitutional law and Cæsarism, culminating in the death of Charles I, but ending only with the accession of William and Mary. Born on an island remote from any town, and environed by an almost impenetrable, wood, it has lived to see London stretching out its boundaries till now the once secluded resort of worldwearied monks is in the heart of the busiest and most populous centre of Christendom. Born in an age without carriage roads, it has lived to see the island of Great Britain intersected by innumerable railways. Born in an age when commerce was unknown, when piracy was honourable, when war was a trade and consequently there was little trade but war, when post-offices were unknown, because few knew how to write, and books unheard of, because the printing-press was as yet unconstructed and few knew how to read, it has lived to see the Anglo-Saxon race mistress of the ocean by its commerce rather than its navy, master of the whole world by its civilization rather than its arms, laying aside the bow for the cannon, and the cannon for the printing-press, substituting for the activities of the mere animal vigor of its sometimes brutal boyhood the more enduring and beneficent activities of refined manhood.—Lyman Abbott.

Suns in Flames.

HOW THE EARTH MAY BE DESTROYED AND WHEREIN OUR SAFETY LIES.

The catastrophe in the stellar system-the conflagration of a star-which caused so much commotion in astronomical circles a few months ago, is made the subject of an article in *Belgravia* (March) by Richard A. Proctor. He says that this catastrophe happened probably a hundred years ago; the messenger which brought the news to us, though travelling at a rate sufficient to

reaching us last November. If a similar accident happened to our sun the creatures on that side of the earth turned towards him would be destroyed in an instant, and the rest very quickly afterwards. The heavens would be dissolved, and the elements would melt with fervent heat. The question is asked whether the earth is in this danger, and whether warning would be given of the coming destruction. The answer may be gathered from the facts mentioned in the article. There have been other solar conflagrations before that which was made known last fall. The first on record-observed by Hipparchus-occurred 2,000 years ago. It was seen blazing in full day-light, showing that it was many times brighter than Sirius, the blazing dog star. It is called a new star because it had ever been invisible until its conflagration made its light temporarily visible. The next new star (or stellar conflagration) appeared in the region of the heavens between Cepheus and Cassiopeia three times, A. D. 945,1264,1572, and is expected to be seen on fire again before long. This star remained burning at its last appearance for sixteen months. It appeared larger than Jupiter and brighter than Sirius. It did not attain this lustre gradually, but shone forth at once in its full size and brightness as if it had been of instant creation. In 1596 Fabricius observed a new Cygnus, remaining visible for nearly two years. In 1848 another was seen, which has continued in existence since its apparent creation. By the aid of the telespectroscope—an instrument combining the telescope and the spectroscope-it was found that the increase in the star's light rendering the star visible was due to the abnormal heat of the hydrogen surrounding that remote sun. But it could not be so easily decided whether this hydrogen was aglow with the heat of the star or whether absolute combustion was in process. In other words, was it as a red-hot piece of iron or like a red-hot coal? These star conflagrations, it is believed, are caused by contact with other heavenly bodies-meteoric flights travelling on eccentric paths, or those in attendance on the comets. The meteors attendant on a comet continue to follow in its path years after the comet has disappeared. The tail of the comet of 1843 must actually have grazed our sun. Newton's comet nearly approached it. At any time we might be visited by a comet mightier than either, travelling on an orbit intersecting the sun's surface, followed by flights of meteoric masses enormous in size and many in number which, falling upon the sun, would excite his whole frame to a degree of heat far exceeding what he now emits. We have evidence of the tremendous heat to which the sun's surface would be excited in such a case. In 1859 two meteoric masses came in contact with the sun. The downfall of these two bodies only affectted the whole frame of the earth at the very time when the sun had been thus disturbed. Vivid auroras were seen where they had never been seen before, accompanied by electro-magnetic disturbances all over the world. In many places the telegraph struck work, the signal-men received severe shocks, and at Boston a flame of fire followed the pen of Bain's electric telegraph, which writes the message upon chemically-prepared paper. This was the effect of two meteors. The effect of a comet bearing in its flight many millions of meteoric masses falling upon the sun-should that take place -can be understood. Our sun, seen from some remote the news to us, though travelling at a rate sufficient to circle the earth eight times in the course of a second, had traversed millions upon millions of miles before our earth and whatever other members of the solar

system are the abode of life would inevitably be destroyed. If a comet came out of that part of the constellation Taurus, arriving in such a time as to fall upon the sun in May or June, the light of the sun would act as a veil, and we should be instantly destroyed without knowing anything about it. If it fell in November or December we should see it for weeks, and astronomers would be able to tell us when it would fall upon the sun. The disturbance upon the sun would be temporary, but there would be no students of science left to record the effects. The chances are largely against such an accident. Our sun is one among millions, any one of which would become visible to the eye under such an accident, yet during the last 2,000 years less than twenty such catastrophes have been recorded. Mr. Proctor, more over, re-assures us in another way. He says in effect that all but one of these conflagrations have appeared in the zone of the Milky Way, and that one in a region connected with the Milky Way by a well marked stream of stars ; that the process of development is still going on in that region, but that if there be among the comets travelling in regular attendance upon the sun one whose orbit intersects the sun's globe it must have struck before the era of man, and that in our solar system we may fairly believe that all comets of the destructive sort have been eliminated, and that for many ages still to come the sun will continue to discharge his duties as fire, light, and life of the solar system.

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(POR THE PROVINCE OF QUEBEC.)

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Synopsis of Temperature, Cloud and Precipitation, for the Month of July, 1877, compiled at the Toronto Observatory

From Observations in the several Provinces of the Dominion of

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