

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

- Coloured covers/
Couverture de couleur
- Covers damaged/
Couverture endommagée
- Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- Cover title missing/
Le titre de couverture manque
- Coloured maps/
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- Bound with other material/
Relié avec d'autres documents
- Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.
- Additional comments:/
Commentaires supplémentaires:

- Coloured pages/
Pages de couleur
 - Pages damaged/
Pages endommagées
 - Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
 - Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
 - Pages detached/
Pages détachées
 - Showthrough/
Transparence
 - Quality of print varies/
Qualité inégale de l'impression
 - Continuous pagination/
Pagination continue
 - Includes index(es)/
Comprend un (des) index
- Title on header taken from: /
Le titre de l'en-tête provient:
- Title page of issue/
Page de titre de la livraison
 - Caption of issue/
Titre de départ de la livraison
 - Masthead/
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

THE
EDUCATIONAL RECORD
OF THE
PROVINCE OF QUEBEC.

No. 2.

FEBRUARY, 1898.

VOL. XVIII.

Articles : Original and Selected.

SAUVEUR METHODS IN LANGUAGE TEACHING

BY MISS LILLIAN B. ROBINS, B.A.

The home of Dr. Sauveur's Summer School of Languages is among the hills of southern Massachusetts, in the little village town of Amherst. Those who have been in Switzerland tell us that the scenery of Amherst is very suggestive of that lovely country. The one thing lacking is water. It is stated that the Connecticut River may be seen from the hill on which the college grounds are situated, but I was never able to discover the right point for observation. Perhaps it is visible from the top of the tower of the main building of the college—the highest point in and around Amherst for some distance. The college buildings are numerous, some of them being of fine architectural design. The one where most of the classes of the Summer School were held resembled somewhat the old Panet Street School—not quite so dingy however. Others are as fine as some of the buildings on our own college grounds. Looking from the top of the hill where the college buildings cluster around a very fine campus, we see down into a somewhat narrow valley encircling the hill, while in the distance beyond you note the mountains of Massachusetts, rising higher and higher as they recede. It is a beautiful spot. Fine trees growing in groups or in avenues afford delightful shade. In early morning or in the evening it is like a little paradise. The

air is odorous with the perfume of the sweet cedar hedges, which are the boundary lines for the well-kept lawns in and around the town. The birds flood the air with their song. The squirrels play around your feet as you sit on the college steps. Everything in and around Amherst is well-kept. There are very few children to be seen, owing probably to the fact that the three objects of interest are the Amherst College and the Massachusetts State Agricultural College in winter and the School of Languages in summer. Here is one home and, some would claim, the birth-place, in America, of the Natural Method in language teaching.

Many men have laid claim to the distinction of introducing the Natural Method of teaching languages, others have had the credit ascribed to them without seeking it. Omitting the first class, which is too numerous to mention, let us look for a moment at the second. Three centuries ago Montaigne's father, a man of considerable originality, as originality was then and is now-a-days, was desirous of trying an educational experiment upon his son. He had the, as yet, toddling baby taught Latin as his native tongue. A German, a Latin scholar, but no Frenchman, was engaged, who spoke to the infant only in the language of Terence and Platus (I trust that he omitted the slang.) The father forbade a word to be spoken to him in any other tongue. Mother, brothers, servants and villagers must either speak Latin, make signs, or be silent in his presence. About this time many other voices were crying out against the unnatural methods by which language was being taught. The suggestions as to how a reform was to come about was made by the methods of Socrates and Plato (of whom Emerson said, "He recognized more genially, one would say, than any since, the *hope of education*") in the teaching of their pupils. It was to be by question and answer between pupil and teacher, leading the pupil from the known to the unknown, from that which is simple to that which is complex. It was to be by carefully graded questions, in the language to be learned, on the part of the teacher. These models of conversation furnished by Socrates and Plato have been an inspiration to teachers and students up to the present time, and will lose their power only when we cease to require to learn something new.

The battle between the natural and the unnatural has

been fierce at times, desultory at times, and unsatisfactory always, for three centuries in most civilized countries. Within our own times Dr. John Stuart Blackie has fought a winning battle for the introduction of Greek as a living tongue. I have been told that a modern Greek has been installed as professor of Greek in one of the Scottish universities. Dr. Blackie says, "Modern Greek is not a patois, a mongrel, a hybrid or degraded dialect in any legitimate sense of the word; it is the same language in which St. Paul delivered his discourse to the Athenians from Mars Hill in the first century, with only such slight variations as the course of time naturally brings with it in the case of all spoken languages which have enjoyed an unbroken continuity of cultivated usage." Greek has enjoyed this for three thousand years. "Possibly I may yet see the time when not only young men in the public service of the country, frequenting various parts of the Mediterranean, will, as a matter of course, speak Greek as readily as French, but even the professional inculcators of scholastic Greek in our great schools and universities will release somewhat of the rigidity of their method and institute practical exercises in colloquial Greek as a most beneficial adjunct to the severity of their strictly philological drill."

It does not matter, however; when we begin this subject of the natural method, we get back to a woman at last. Was it not by the natural method that Mother Eve taught little Cain and Abel those primitive sounds with which she had been intuitively endowed and by means of which she communicated with Adam? Are not the mothers of every land on earth teaching their offspring in just this natural way. Some of the so-called natural methods in vogue are parodies on nature. What mother teaches her native tongue to her child with grammar in one hand and dictionary in the other? Every mother knows that the child must first have the sentences, first be able to speak, and then having the natural expression of thought, it will come to appreciate the grammar—"the artificial arrangement of generalizations with respect to language."

But time passes and we want to have a look at Dr. Sauveur, the mainspring of the machinery of the Summer School. Dr. Sauveur's success as a teacher of languages—and this has been remarkable—is due largely to his own personality. His wonderful versatility, his brightness, his

enthusiasm, his optimism, his genial kindly manner breathe through everything that he does. He lives with the great and the good of all ages. He knows their thoughts and has come to think with them. I have seen his method in the hands of a man who did not have for his native, mental air the same bright, crisp, sunny, frosty, living atmosphere. He did not bring the same personality into his work, and though he used the same text-books, the result was utter failure. In Dr. Sauveur's hands his method is an inspiration in language teaching. On the other hand many men and women, not following closely the method used by Dr. Sauveur, have, with a like enthusiasm, been wonderfully successful in teaching language. It is not the method (though that must be at least rational) that is of supreme importance: it is the intelligence and soul that put the method in operation. I was struck with the enthusiasm of all the teachers of the school, with perhaps one or two exceptions. Whence comes this great enthusiasm? It is not the sort of fruit that is produced from a dry, hard-baked, poverty-stricken soil. A teacher cannot be filled with enthusiasm for her work when she has to spend so much of her time in the petty economies of life—in turning her dresses, in patching her clothes, mending old gloves beyond what is mete, and in pinching and scraping generally. It is a wretchedly poor economy that underpays teachers, so that they have no money to buy the books that open the doors of the noblest minds of all time, and no time to study the books they may have in their possession. The teacher who knows nothing of her subject beyond the text book she uses has surely a mind ill-furnished for her work. What enthusiasm can there be in the minds ground down by constant want? It is a stupid economy that pays a teacher so little that she has not the wherewithal to prosecute her work further, to enlarge her mind by travel, by reading, by attending courses of lectures, by joining conferences of teachers who are doing the same work as she is doing, by keeping herself in touch with all modern as well as ancient thought on her work, and above all and far beyond all, that gives a teacher such hard work and little remuneration, that she has not the leisure nor elasticity of mind that will enable her to sit down and think, think, think, plan, plan, plan, for her work. But you say this has nothing to do with the matter. Oh yes, it has everything to do with it. The teachers at Amherst were well paid.

Now let us see Dr. Sauveur's methods in 'operation. A bountiful repast is here served of English by Dr. Rolfe, French by Dr. Sauveur and others, Greek by Dr. Leotsakos, Latin, German, Italian and Spanish by numerous instructors. You may talk French at breakfast, attend a succession of classes in French from eight o'clock in the morning until one in the afternoon, hearing nothing but French. You may then go home and talk French at dinner, afterwards join a class for conversation in French in the afternoon, and if you are a favoured one may be asked to join Dr. Sauveur's own conversation circle from four to five, then have French at tea. In the evening there is frequently a popular lecture in French or some other language. Then you are free to go home and have French nightmare for as long as you like—and longer. Part of this programme was in operation when the thermometer registered 96° in the shade. What a grand, what a noble thing is enthusiasm! A similar programme accompanies the other languages, though there is a little more French than anything else.

But come now into Dr. Sauveur's class-room. He is conducting a lesson in French on the words *fou*, fool, and *feu*, fire. The lesson is one found in Dr. Sauveur's book "Causeries avec mes Elèves." By adroit questioning, in French of course, he draws from the class the story of the young Harvard graduate, who undertook, armed with a French grammar and "L'Histoire de la Civilisation en Europe," to conduct a merchant from Boston to Europe. The graduate and the merchant arrive safely at Paris, and the young student, leaving his companion to rest in bed after the fatigue of the voyage, goes out to see Paris and air his French. As it is New Year's time and quite cold, the merchant asks him as he is preparing to depart to tell the master of the hotel not to let his fire go out. Unfortunately, though the young man's grammar gives the word *feu* and its meaning, it does not give the pronunciation. In passing out he says to the servant in the hall, "*Vous ne devez pas laisser sortir le fou de la chambre vingt-quatre.*" The servant replies, "*Savez tranquille, je suis vieux soldat, et le fou me passera sur le corps avant de sortir.*" And our graduate of the university proceeds on his way "to present his French to the Parisians." After a few hours the merchant rises and proceeds to leave his room; but, just as he opens the door, he encounters the hotel servant, who refuses to

allow him to pass out. They proceed to high words each in his own language; from words they go to blows, and the *vieux soldat* gets the best of it, while the merchant retires to nurse his sore head and sorer feelings. After some time his friend the student returns and explanations are in order, when it comes out that *fou* is fool, and *feu*, fire. This story is drawn from a class of beginners in French, some of whom, at least to my knowledge, knew no French four weeks before. The questioning all in French is a marvel of ingenuity. Gesture supplies any missing links in the minds of the students. The doctor's motto seems to be never to lose sight of a word that is introduced to the students. Follow it up. Bring it again and again into the conversation, passing from words that are known to new words. No slipshod pronunciation is allowed. Slowly at first and gradually faster and faster it proceeds until the sound is as that of a Frenchman. Then again the lesson is a unit—not a lot of detached sentences, meaning nothing in relation to one another. What interest is there for any one in the following sentences: My aunt is poor. Your grand-mother's brother is dead. The table has four legs. Eat your soup with a spoon. All the *life* is taken out of a language by combining such sentences as these. No word is written on the black-board and no book is opened until the time has come to prepare the advance lesson. While the class is in progress, a guileless youth enters the class-room, who is there for the first time. Dr. Sauveur seizes upon him as an objective point for a question he has had in pickle for some time. He speaks to him, "*Monsieur, avez-vous un fou dans votre maison?*" The young man replies, "*Oui, monsieur, nous avons un fou dans notre maison.*" Then the doctor soliloquizes, "*Oh oui, les Américains ont toujours un fou dans leur chambre. C'est bien curieux.*" Another little joke is to ask a member of the class, when the lesson on animals is under discussion, "*Quel est le plus intelligent des animaux?*" The answers given are, the horse, the dog, man. But none of these are satisfactory. At last Dr. Sauveur himself answers, "*C'est la femme, n'est-ce pas? Oh oui, c'est la femme Française.*"

The points in language teaching emphasized by Dr. Sauveur are these, "No word of English; passing from the known to the unknown in one unbroken chain, discussing incessantly with the class, questioning, questioning, ques-

tioning, which implies answering." If we want to learn the art of questioning well let us study Plato and Socrates. Grammars come after some knowledge at least of a language, as generalization comes after the facts observed, though the pupils are instinctively learning grammar from the first sentence they hear. A French grammar written in English is a most detrimental book for teachers and pupils. Our language conversations should be of the highest tone, be worthy of ourselves, should have *esprit*, talent and good sense.

There are three classes of languages, the languages that all acknowledge to be living, as French, German, etc., the languages that all acknowledge to be dead, as Latin, and the languages that some people think are dead and that are living, for example the Greek. The first class of languages has been discussed. The second class, represented by the Latin, will require but few words. The main difference between the teaching of a modern language and Latin lies in this. There are many modern thoughts that the Romans did not have. Times and thought have changed. The Latin language died and was petrified at a certain stage of growth and did not form new words to meet the growth of thought. It would be useless then to speak in Latin of those things which employ the minds of men in their everyday life. But to be able to appreciate the Roman writers we must come to understand their language. We must speak in Latin of those things which interested Cæsar, Virgil, Tacitus, Horace, Livy, Juvenal, Cicero and Ovid. Introduce the child at once to Cæsar instead of to uninteresting words and detached sentences. Cæsar has been kind enough to make the first chapter of his commentaries of such a character as to readily admit of this—not that he at all intended to do so. You may ask hundreds of questions in Latin on that first chapter and not have exhausted either the chapter or yourself. Dr. Sauveur's motto in teaching Latin is, "Speak Latin, but only the Latin which occupied the noble minds of antiquity." Outside of this the methods are the same as for modern languages. Let no teacher of Latin be without Dr. Sauveur's excellent book, "*Colloquia Cæsariana de Bello Gallico*". Translations should be rendered with no shadow of a shade of difference in meaning from the original.

I think that McGill University, in bringing out last

winter the Latin play the "*Rudens Plauti*," indicated the standard at which we as teachers should aim. The pronunciation used was the Roman. If our pupils do not understand, without translating, sentences of ever increasing difficulty, how can they hope in course of time to appreciate the *Rudens Plauti*, an ode of Horace, or the work of any Latin author. We must be right at the start, and then we may hope to be right at the finish.

Let us now turn to the Greek. Think you that the Greeks believe that they speak a language different from that of their forefathers? Think you that they will admit that they are a mongrel race of no nationality? We are just now inclined to despise the Greek because of his action in the late war with Turkey, but let us ask ourselves what better we would have done with a race on our frontier capable neither of receiving good nor giving good, a race that had been there for over four hundred years (since 1453, the fall of Constantinople) and pressing ever closer and closer around our boundary lines. The Greeks were paralyzed by the overwhelming numbers of the Turks. They wanted to be brave like their ancestors, but the odds were too great. How Byron loved Greece! He said of her :

"T is Greece, but living Greece no more !
 So coldly sweet, so deadly fair,
 We start, for soul is wanting there.
 Hers is the loveliness in death,
 That parts not quite with parting breath ;
 But beauty with that fearful bloom,
 That hue which haunts it to the tomb,
 Expression's last receding ray,
 A gilded halo hovering round decay,
 The farewell beam of Feeling passed away !
 Speak of that flame, perchance of heavenly birth,
 Which gleams, but warms no more its cherish'd earth !"

But this is not what modern Greeks say if one may judge from a single example. Dr. Leotsakos says, She is not dead, she is but sleeping,—resting after the long mental toil which produced such a galaxy of geniuses as Homer, Herodotus, Thucydides, Xenophon, Æschylus, Plato, Aristotle, Plutarch, Sophocles, Euripides, Aristophanes, Demosthenes, Pericles, Phidias, Polycletus, Myron, and so forth. She will rise again when she recovers from her old time labours and will live to show the world "that there are things in heaven and earth not dreamed of in our philosophy." It is a good thing to have a noble ideal!

Let us, however, come into Dr. Leotsakos' class, the modern Greek, first. As you enter the door these words fall upon your ear, "*Kallèn heméran Déspoinis,—ti kánnete* ; Judging from the upward inflection of the voice you conclude that a question has been asked in the second sentence. Rummaging through your lumber of dead learning you remember that Æschylus in his Prometheus Vinctus, or another of the poets, used *màlista gé* for yes. So, as yes is more frequently asked for than no, you volunteer the answer, *màlista gé* (an answer not at all to the point, as the Greek has merely said, " Good morning, how are you ?") It is now the Greek's turn to be astonished, and he finally asks you to kindly spell it, which you do. Ah! he says, *mista ye*, *mista* only. You are surprised to find, when the first difficulties of the new pronunciation are over, that modern Greek is very much like ancient Greek, and you wish that you had been taught a little more than translation, grammar and philological disquisitions, when in school and college. You find that you have not at your command the forms of sentences necessary for asking even simple questions in Greek. You wish that you had been taught, at the very least, to learn passages of Greek by heart. What an interesting class this modern Greek is! You learn many a lesson from it. You see the breaking down of the old synthetic, character of Greek and the coming in of the analytic, and many other lessons too numerous to mention. All is Greek here, no English, or practically none.

Greek, as a disciplinary study and because of the world of original genius into which it ushers us, is second to no language that is or has been spoken. Emerson says of Plato alone, " neither Saxon nor Roman have availed to add any idea to his categories." Greek is so far in advance of the other languages in these respects that it leaves them behind, almost out of sight ; and yet because of its difficult characters and want, so many think, of practical utility it is placed second to Latin, far behind French, and about on a par with German. Of course we are all prepared to admit that in this country French is an absolute necessity.

Let us look in now at the class reading Homer, and it is literally *reading* Homer, not picking out a second rate translation. The passage, we will suppose, is in the eleventh book of the Odyssey, " The Descent into Hades." The

Greek reads it first with life, spirit and appreciation, sometimes metrically, sometimes accentually, for the Greeks do accent their words according to the written accents, Anticleia, mother of Odysseus (the visitor to Hades) is telling her son how by love for him she pined away after his departure from home, and thus he encounters her in Hades. "So too I died. But the keen-eyed Artemis within the palace slew me not with his mild shafts, nor did some wasting sickness take my life, but strong desire and yearning love for thee stole my fond life away."

You volunteer the remark that you do not think the death of Anticleia was very noble, that she died from selfish motives—her desire to see her son,—that the Bible teaches us sacrifice of self, that we are to live for others' good, not to die to serve our own ends. But the Greek differs from you and tells you that Anticleia represents one of the noblest types of womanhood. You can now easily understand the statement made by the Greek himself, that in some parts of Greece, especially in the mountains, Homer is even yet the Bible of the people or of equal authority with the Bible. Another exercise in Homer is the rendering of Homeric Greek into the Attic. At another hour the class is discussing the fine periods of Thucydides in the "Funeral Oration of Pericles." One hour a day is devoted to translating into Greek, English sentences based on Xenophon's *Cyropædia*. There are three or four hours of instruction in Greek each day. Besides this you may take your meals at a table presided over by Dr. Leotsakos, if you care to run the risk of Greek nightmare.

Fellow-teachers, I saw several things in Amherst that we might adopt with advantage to our work, many things as well done as the work in our own city and some things that were inferior to those to which we are accustomed.

Editorial Notes and Comments.

UNDER the heading, "A Queen of Hearts," a writer in one of our exchanges says: "The winsome lady who holds court in her modest school-room, her courtiers seldom forgetting that they are little ladies and gentlemen, does this only because she has their hearts; and their hearts she can have only as she can control their thoughts; and their

thoughts she controls only through her own fine personality, and by constantly putting into their receptive minds suggestions pleasing and wholesome. She lives out her own beautiful and earnest life with them. By quiet example, by personal appeal, by song and story she reaches them. She knows the best in literature and in life, and she gives them of her best, and they go out from her with a wealth of treasure in heart and mind that for not a few of her pupils will be cumulative for a lifetime. She holds, with Froebel, that 'all education not founded in religion is unproductive;' and, with Warner, that 'good literature is as necessary to the growth of the soul as good air to the growth of the body, and that it is just as bad to put weak thought into the mind of a child as to shut it up in a room that is unventilated.' She does not try to teach so much, but she has many an immortal poem and many a good thing in prose, from the Bible and elsewhere, as familiar in her school as is the old multiplication table. Is such a teacher good to live with?"

—THIS, says an exchange, is a good resolution: That I be a committee of one to inquire impartially into the aims, motives, character and achievements of myself.

—THERE is a good deal of solid truth hinted at in the *Moderator's* dramatic exclamations: "A school without a library! A farmer without a plough! A blacksmith without a forge! A carpenter without a plane! A preacher without a Bible! A doctor without pills! A lawyer without Blackstone! A soldier without a gun! A house-keeper without a broom! A printer without his stick! A boy without a jackknife!"

—IF, remarks the *Teacher*, the schools depended for their beauty and attractiveness upon the supplies furnished by school boards, they would be bare and dreary places, indeed. Notwithstanding the fact that teachers are paid less than other professional workers, they are most generous and unselfish with their small incomes, when the success of their work depends upon expenditures, which the public cannot or will not make. Books, periodicals, pictures and supplies of all sorts come from the scanty purses of overworked teachers. The care and loving thought bestowed by teachers upon their school-rooms have a most signal and direct bearing upon the lives of their pupils, and the teacher finds, without doubt, in the consciousness

of this fact her best reward. It is a question, however, if school boards are not behind the times in the matter not only of the supplies furnished schools, but also of their character, and whether they are not leaving too much to be done by the teacher. As a single illustration, the use of lantern slides for illustrative purposes may be taken. The school boards are evidently still under the impression that lantern slides are synonymous with a "show," and, consequently, teachers are allowed to furnish these necessary adjuncts to their work at their own expense. In a number of our schools, the teachers have collections of lantern slides amounting to hundreds, all purchased at their own expense. It is not reasonable to suppose that this sacrifice of teachers' money has been made for the amusement of scholars. If such supplies are necessary for the prosecution of school work, the public should pay for them and not the teacher, who can ill-afford the expense.

—THE spirit of Oklahoma Territory, U. S. A., is decidedly progressive. Educational research in that western country has taken a novel form, and at the last meeting of the Territorial Teachers' Association, the results of one of these investigations were given by Professor Elder, of the Normal University, in the paper on "The Causes of Failure in Arithmetic Study." According to the account of the meeting given in the *School Journal*, Professor Elder "adopted the novel plan of sending out a list of some thirty questions to pupils throughout the territory, requesting answers upon the success or failure of their teachers in presenting arithmetic. Each student was warned against letting his likes or dislikes prejudice his answers, and was asked to give his present opinion as he best remembered, concerning eight of his previous teachers." The professor then commented on these answers and gave the following summary of opinions and "suggestive remarks" thus gathered, adding that this summary might be termed the students' point of view. He said: "My fourth teacher tangled things, my sixth untangled them. Explain examples with smaller ones of the same kind. Teachers of district schools should be graded on their ability to analyze. This can be done at normals. A teacher who can get only a third-grade certificate on the present basis ought not to be allowed to teach in any school. Make pupils think more for themselves. I was taught to depend too much upon

rules. Have teachers better qualified in analysis. Leave out impossible and impracticable problems. I think country teachers unqualified for their work. Written analysis helps me most. Have the student study analysis. Stop recitation in time to explain the advance lesson. Have books without answers ; teach the student to reason for himself. The student's deficiency results more from lack of competent instruction at the time of laying the foundation of mathematics than from lack of natural ability. The memory is taxed by rule-learning and the reason is not developed. Have only competent teachers, especially in the early stages. Too much because-the-rule-says-so work ; too little reason. Teachers should illustrate more, pay less attention to rules and more to principles, and become more familiar with the subject. Teach pupils to think rather than to solve problems. Teach more of the why ; require more accuracy ; don't help the pupil too much. Have more mental work. Reason more and drop the rules ; spoil the rod. Don't give long lessons. Let pupils reason for their rule. Use common sense and be accurate. Get an arithmetic without rules. Make students think more ; help them less. Never tell a pupil how unless he positively cannot do it. Take more time to explain new principles. Let the teachers be better in mathematics. Of my eleven teachers only one was really good in arithmetic ; two were fairly good ; if the rest knew much about it they never impressed me with the fact. I never cared for arithmetic until my sixth year, when I was made to reason everything for myself. Let the pupil study more, and so on. He must be an ideal teacher or a confirmed egotist who cannot find suggestions helpful to his work in this view of himself and his methods as seen through the pupil's eye."

Current Events.

THERE is much interesting matter contained in the last annual report of the Corporation of McGill University. In connection with the faculty of Arts, reference is made to the changes which are to affect the curriculum, beginning with the next session. Options are to be allowed in the matriculation examinations. In the course of study laid down for undergraduates, Latin and Greek will not both

be required for the individual student, but, it is said, better opportunities will be afforded to those who wish to study these subjects. The fact is also mentioned that there is need of more endowments, and referring to this matter the report says, "at present the faculty possesses only one chair of Philosophy (Mental and Moral). There are no endowed professorships of Modern Literature, and no provision is made for the teaching of such subjects as Economics and Political Science." These are serious drawbacks and prevent the Arts Faculty, the importance of which should never be lost sight of, from keeping in line with the great development of the professional departments. The lack of opportunities for studying such an important subject as Political Science is of itself a serious matter. McGill is also badly in need of the means to enable it to offer post graduate scholarships and bursaries to deserving graduates, and inducements of the same nature should be extended to students who have taken a high standing in their Arts course, to pursue their professional studies in their Alma Mater. With regard to the faculty of Applied Science, things have a much more prosperous look, and thanks to the munificence of friends of the University, it has the buildings, equipments and means necessary for the carrying on of the work, not only of instruction, but also of scientific research, in which latter connection some excellent work has been done during the last year. As an evidence of the high opinion in which its laboratories are held, it may be remarked that three of those who hold scholarships from the Royal Commissioners for the Exhibition of 1851, are now at work in the Macdonald Physics and Engineering buildings. One of these students is a graduate of the University of Sydney, New South Wales. The statement in the report that "the University is at the present moment conspicuously in need of further financial assistance, in order to bring the revenue to an equality with the expenditure," may seem a strange one to many; but it is to be remembered that most of the large gifts which have been made to McGill have been made for special purposes, and, as the report says, these have a tendency to consume themselves without leaving anything with which to meet the expenses of the University as a whole. In fact, there is at present a deficit of \$18,000 on the general account, and this goes to show the urgent need there is for a large amount to be

added to the general endowment fund of the institution. As its work becomes greater so the demands on its resources increase, although the revenue from investments is becoming smaller if anything. The governors ask for four hundred thousand dollars at least for the general purposes of the University, feeling as they do, that without such an additional endowment, it will be "seriously handicapped in the effort to go forward with the educational work which makes ever-increasing demands upon its resources."

—THE news comes from Toronto to the *Witness*, that, owing to the trade depression of the past few years, the Public School Board has been thwarted by the City Council in its every attempt to secure the increased school accommodation necessary in consequence of the natural growth of the attendance. The result is that there are no less than one thousand four hundred and thirty-seven pupils taught in temporary class-rooms, a large proportion being in wood-sheds and basements. The attendance for January was two thousand seven hundred and fifty, an increase of five hundred and seventy-six over last year. Considerable public feeling is being aroused over the insanitary and inconvenient wood-shed and basement class-rooms, and with the improved business the trustees expect to be authorized to erect a number of new schools.

—ON the occasion of a recent distribution of prizes at the High School for Girls in Liverpool, England, the following short address by Princess Louise was read:—"From the report which you have heard the great thing for the public to look to is the thoroughness of the teaching in all branches. What useful members of society and of the world at large these girls must become when grown to womanhood! They will be mothers fit to help their boys in many a hard task, and wives to help their husbands make a higher standard in this way all through the country. This is the basis of all advance in the homes of us English."

—THE largest school in the world is in the slums of London. There are 3,500 pupils and 100 teachers. This is Lord Rothschild's pet institution, and were it not for his support, the school would be unable to meet its vast expenses. Owing to his generosity free breakfasts are given every morning to all children who wish to take

them, no questions being asked. He presents every boy with a suit of clothes and a pair of boots, and every girl with a dress and a pair of boots in the month of April, near the Jewish Passover. A second pair of boots is offered in October to every child whose boots are not likely to last during the winter. A popular feature of the school is the savings bank department instituted by the president. In order to encourage habits of thrift, he allows an interest of ten per cent. per annum on all savings. The teachers are permitted to avail themselves of the benefits of the bank.—*School Journal.*

—THE same magazine is responsible for the following paragraph:—"There are signs of an awakening in even old England. The *Mail* of London has repeatedly called attention to the bad teaching in the schools as the real cause of the general stagnation of thought and the domination of ignorant trade unionism that prevails. A summer school of pedagogy was held in Oxford last summer; only thirteen attended. The plan was to have two lessons of a half hour each given to a class of boys, by the students in turn, witnessed by the rest; this was followed by criticism for an hour; followed in turn by a lecture on the principles of education. The students went home and had questions on the lectures sent them; on these a diploma was to be based. It appears that the answers to questions on the history of education were exceedingly faulty; there was a general excellence in class knowledge."

—The teacher of physiology in a school in the State of New York has resigned her position as a consequence of the Board of Education having condemned her action in dissecting a cat and exhibiting its vital organs to the younger pupils in the school. The board passed a resolution to the effect that, in its opinion, dissection was "more demoralizing than enlightening in its influence upon those in attendance at the school," and stated that a repetition of the offence would be considered sufficient grounds for the immediate dismissal of any teacher.

—It would seem that the authorities in some of the colleges of the United States are coming to realize that it is worth their while to exercise a legitimate authority over the students who are presumably under their care. It is said that forty-one students have been dismissed from the Leland Stanford, Jr., University in California on account

of idle and dissolute habits, in accordance with the recently announced policy of President Jordan.

—FOR some time past, the teachers of Chicago have been fighting for higher salaries, and news has been received that they have won the battle. The Board of Education, says the *Journal*, has decided that the funds are sufficient to start the desired increase at once. The proposition of Pres. Halle, of the board, is that, beginning with the coming fiscal year, each grade teacher shall receive an increase in salary of \$25. This shall continue every year until the salary is \$1,000. For example, the teacher receiving \$600 this year will have \$625 next year, \$650 the year after, and so on until the \$1,000 limit is reached. The board will require an addition of \$54,000 for this purpose the first year and \$117,000 the next. This will supply the needs of 2,160 teachers. After the third year, the adjustment will go on without further strain on the finances.

—FROM the reports given in the newspapers, of the first meeting between the school authorities of New York and the new mayor, Mr. Van Wyck, it would seem that educational progress in Greater New York will not be assisted to any great extent by the latter. He is evidently of the opinion that it is folly to teach children anything beyond the "three R's."

Practical Hints and Examination Papers.

EXAMINATIONS.

The problem of examination or no examination is, and has been, a vexed question among educational authorities. Many and varied have been the views expressed by leading educators on the question, and out of the smoke of the battle very little light on the contested ground has arisen. The following paragraph, clipped from the annual report of the Minister of Education for the year 1896, gives in a nut shell the condition of affairs in the Province of Ontario :

"Written examinations have an important educational value. Much has been said regarding the evils of examinations. Arguments have been quoted to show the disastrous results that follow to pupils and teachers where tests of this kind are employed. It should be remembered that scarcely one of the stereotyped objections has any bearing

on the question of qualifying examinations. *No educationist of standing has ever proposed to do away with tests such as the departmental examinations furnish.* Written examinations, so strongly and properly condemned in English pedagogical works are such competitive tests as have been used for awarding prizes, scholarships or positions in the Civil Service. Writers who have, in no mistaken language, pointed out the immoral tendencies of competitive examinations, are the most outspoken in their approval of examinations when conducted for legitimate purposes. The American authors, who are often referred to as opposed to written examinations, have had their arguments generally misapplied. *The evil of basing the promotion of pupils in public schools solely on a final written examination is well known.* A practice of this kind has no place now in well-conducted schools. Such examinations were used for purposes of promotion and served no other object. The papers were sometimes set by those who had little or no practical experience in school work. The questions called for knowledge that was badly digested and discouraged intellectual development. The memory was the chief faculty brought into requisition, and originality of effort had little value. Such questions gave rise to hasty, crude, and even dishonest preparation. Good teaching was not rewarded by examinations of this kind. *To make promotions depend in the case of pupils in a public school, solely on a final examination, is bad.* It is doubly so when the questions are so faulty as to place good teaching at a discount. The high school entrance examination is not necessarily a promotion examination. It must be remembered, moreover, that this examination is now entirely in the hands of the local boards, and there is ample power given to the examiners to admit any deserving pupil to the high school, or to reject any one who is regarded incompetent to leave the public school. In the case of the public school leaving examination there is no danger that any troublesome barrier will beset the advancement of properly trained pupils. The regulations, as now framed, and the relative standing to be submitted each year by the principals, cannot fail to guard all educational interests, as well as to compel only weak candidates to make better preparation of their elementary work."

This expresses fully our views. Bad examinations are

bad, and that continually ; but a properly prepared examination paper not only tests the pupil's efficiency, but leads him to think. The result of writing on such a paper is as good mental training as the most carefully prepared and skilfully presented lesson could be.

What educator would think of teaching the poor pupil, day in and day out, for a term ? He rather makes a well-thought out combination of imparting and of examining, letting the one supplement the other, and thus he finds whether his pupils are assimilating the matter which he is presenting to them.

This is the true function of examinations. The days of the old competitive examination have gone. Promotion by examination, and examination only, is a thing of the past. But still, the true function of the examination remains, the testing of the pupil's assimilated knowledge and the revealing of the pupil's power. To the student, written examinations are often revelations of his ability as well as of his weaknesses and defects.

Then, to the teacher a properly prepared examination is of the utmost importance. Not only does it reveal the results of his labour, the failure or success of his methods, the soundness or weakness of his pedagogical principles, but it becomes a virtual eye-opener to an inexperienced teacher, who wanders in his instruction, talks to little purpose, explains very much, but seldom makes a halt to test results. Any one at all familiar with the educational progress of Ontario must be aware of the revolutionary effect which the Mathematical papers, set by Dr. McLellan, and the English papers, set by Mr. John Seath, have had on the teaching of these subjects in our schools. They were examinations which not only tested knowledge, intellectual skill and mental power, but they also guided the teacher in the best methods of instruction.—*The Canadian Teacher*.

TRY.—Under this heading the "Author of Preston Papers," says in the *New Education* :—

No teacher is so humble, so isolated from the great *general cause* of education, that her influence is not felt for the moral, intellectual and physical development of the entire nation. Remember this and try, by elevating the standards of each department of your work :

1. To create a strong sentiment in your pupils for each

of the cardinal virtues, always remembering that unless you *have* this nobility, you cannot inspire it in others.

2. To impress upon each of the minds over which you hold temporary sway, the facts that *courtesy* is desirable, that *cleanliness* is essential, that *kindness* brings a reward peculiar to itself. These are "lesser" (?) virtues, but indispensable in a well rounded character.

3. To instil the principles of attention, order, submission to law, reverence for God (*and humanity*), punctuality, accuracy, even in little things, and in *whatever* is done to be in earnest.

4. To *emphasize your beliefs*. Your doubts on any subject, will take care of themselves. *Sow faith* if you would reap peace.

5. To find the germ of good which exists even in the most evil heart. Yours may be the crown given for its fostering and development, when the little seed is found in the heart of a child with wayward tendencies, and yours the hand to lead it in the right way. *Teach as for eternity*.

6. To inculcate care, thought and training for the body as well as the mind and heart. Life is not given to be wasted, but to be protected—as can not be done if left at haphazard.

7. To get others to walk with you in the way of progress. Do you know a dull teacher? Help wake him up. A perfunctory one? Breathe upon him with your surplus enthusiasm, but be sure you have the enthusiasm to spare. A tired one? Show her how to rest; *so few people know how*. A lazy one? Oh my! Your task will be difficult; but you must, you absolutely *must* inspire him (her?) with energy. A discouraged one? Show him how education stands now, as compared with your first recollection of it. An enthusiastic one? *Stay her hands!* Don't be a wet blanket on optimism. Always be ready to *believe the best*, then you will be ready to do the best and be the best. *Try* to see how many others you can impress with the best belief and work.

ARITHMETIC QUESTIONS.—It is always well for the teacher of Arithmetic to give for solution, problems a little different from those contained in the text-book. This keeps your pupil from getting into the habit of working by rule of thumb, and furnishes them with opportunities for exercising their reasoning faculties. To test the quality of the work

you have been doing in this connection, try your class with some of the following problems taken from the *Canadian Teacher* :—

EXERCISE I.

1. On June 29th, 1890, I borrowed \$16.50 to be returned April 30th, 1892. With interest at $6\frac{1}{2}$ per cent., what amount must I then pay ?

2. In what time would a field, 80 by 60 rods, pay for underdraining lengthwise, at 2 cents per foot, if the field yield 2 bushels, at 66 cents, per acre more than before draining ? The drains are 4 rods apart, and the first drain runs down the centre of the field.

3. If 18 men do $\frac{3}{4}$ of a piece of work in 30 days of ten hours, in what time should 15 men do the whole, working 9 hours a day ?

4. Two men start from the same point at the same time to walk in the same direction around a block of land $1\frac{1}{2}$ mile on each side. A goes at the rate of 4 miles and B 3 miles an hour. How far will A walk before he overtakes B ?

EXERCISE II.

1. A man engages a sufficient number of men to do a piece of work in 84 days, if each man does an average day's work. It turns out that three of the men do respectively $\frac{1}{6}$, $\frac{1}{7}$, and $\frac{1}{9}$, less than an average day's work, and two others $\frac{1}{8}$ and $\frac{1}{10}$ more ; and in order to complete the work in the 84 days, he procures the help of 17 additional men for the 84th day. How much less or more than an average day's work on the part of these 17 men is required ?

2. (a) What is meant by averaging accounts ?

(b) Find the equated time for the payment of the following accounts :

John Smith.

1888.	Dr.	
June 10.—To mdse. @ 30 days.....		\$ 950
July 15.— “ “ 45 “		300
Aug. 20.— “ “ 60 “		250
Sept. 1.— “ “ 30 “		150

1888.	Cr.	
July 10.—By cash.....		\$ 450
Aug. 15.— “		350
Sept. 5.— “		200

3. Bought goods at \$5.70 on 4 months' credit and sold them immediately at \$6.12 on such a term of credit as made my immediate gain $6\frac{2}{3}$ per cent. Reckoning interest at 4 per cent. per annum, how long credit did I give?

4. A man has \$20,000 in Bank stock which is at 170 and pays a half-yearly dividend of 5 per cent.; he sells out and invests in stocks at 108, which pays $3\frac{1}{2}$ per cent. half-yearly. Find the change in his half-yearly income.

5. If the avoirdupois lb. is equal to 7,000 grains Troy, and if 6,144 sovereigns weigh 133 lbs. 4 oz. Troy, how many sovereigns will weigh an oz. avoirdupois?

Correspondence, etc.

To the Editor of the EDUCATIONAL RECORD,

DEAR SIR,—Two marked characteristics of the late Bolton Magrath, Inspector of Schools for the counties of Ottawa and Pontiac, were his knowledge of a great number of curious mathematical facts, and the clearness and force with which he could illustrate primary principles in mathematics, or explain an intricate problem. The following is a literal copy of a few pages from some notes which I find amongst old papers. The closing paragraph also well shows his generous sympathy with the teachers of his inspectorate, especially with those in need of his help. This quaint mode of expression was peculiarly natural to him.

Yours, etc.,

Richmond, Que.

J. A. D.

ALGEBRA.

POSITIVE AND NEGATIVE QUANTITIES.

As a positive and a negative quantity are reckoned in opposite directions, the difference between them is greater than either, and is equal to the sum of the units of both.

Suppose A has \$4000 and B owes \$4000. What is the difference of their estates?

A's property can be expressed as + \$4000; B's, as - \$4000. Then $4000 - (-4000) = 4,000 + 4000 = 8000$. In other words $-(-4000) = +4000$.

Hence minus multiplied by minus gives plus. So $-(-a) = +a$. Hence the subtraction of a negative quantity has the same effect as the addition of an equal positive quantity.

Another example: Say the latitude of Aylmer is N. $45^{\circ} 24'$. Buenos Ayres is S. 34° . What is their difference of latitude? Ans. $45^{\circ} 24' + 34^{\circ} = 79^{\circ} 34'$.

(2.) The coefficient of an algebraic quantity shows how many times the quantity multiplied is taken as a term.

If the coefficient is *positive*, it shows how many times the quantity is *added*; if *negative*, how many times it is *subtracted*,

$$\text{Thus } 3a = a + a + a$$

$$-3 \text{ multiplied by } +a = -a - a - a =$$

$$+3 \text{ multiplied by } -a = -3a.$$

So $-a$ multiplied by $+b = +a$ multiplied by $-b = -ab$.

Also -2 multiplied by $-a = -(-a) - (-a) = a + a = 2a$.

(NOTE.—In the last example $-a$ is to be subtracted twice; and subtracting $-a$ twice has the same effect as adding $+a$ twice.)

Hence the rules in algebraic multiplication.

(3.) See prob. 7, page 175, Todhunter's "Algebra for Beginners."

$\sqrt{x^2 - 6x + 16} + (x - 3)^2 = 13$. To facilitate the solution add 7 to both sides, thus making the rational equal to the irrational part on the left hand side of the equation.

Then $x^2 - 6x + 16 + \sqrt{x^2 - 6x + 16} = 20$, or

$$x^2 - 6x + 16 + \sqrt{x^2 - 6x + 16} + \frac{1}{4} = \frac{81}{4}, \text{ or}$$

$$\sqrt{x^2 - 6x + 16} + \frac{1}{2} = + \text{ or } -\frac{9}{2}, \text{ or}$$

$$\sqrt{x^2 - 6x + 16} = +4 \text{ or } -5.$$

Hence $x^2 - 6x + 16 = +16$, or $+25$.

If you take $x^2 - 6x + 16 = 16$, you will get the two *answers*, 6 and 0.

If you use 25, that is, $x^2 - 6x + 16 = 25$, you will get $x = 3 + \text{or } -\sqrt{18}$; and if you substitute this value in the equation $x^2 - 6x + 16 = 25$, the conditions are verified!! Are there then *four* values of x ? The equation is not a pure quadratic, yet may be solved as a quadratic, and the value $x = 3 + \text{or } -\sqrt{18}$ applies to the original equation with the sign in the second number (left hand) changed, or $(x - 3)^2 - \sqrt{x^2 - 6x + 16} = 13$.

Substitute x for its equal $3 + \text{or } -\sqrt{18}$ to prove.

It is now midnight and here I am poking over such probs!!! No more algebra for one month! I have yet to write that poor Miss —— a consoling letter. If I held ill will against any of the teachers and wished

To punish with "extremist" rigour,
I could inflict no penance bigger,
Than, using her as "Larning's" tool,
Appoint her teacher of a school,

Up that Gatineau.

B. M.

Books Received and Reviewed.

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

The February number of the *Atlantic Monthly* contains an able paper on "The Danger of Experimental Psychology," by Professor Hugo Munsterberg, of Harvard University, in which he points out a very serious danger in some present tendencies, and calls a halt to teachers who are dabbling in and studying psychology in the hope of finding something upon which to remodel present methods of instruction. He shows the illusiveness of any such expectation, whence the error arises, and what the real advantage and use of psychology is for the teacher. In the second instalment of Gilbert Parker's romantic story, "The Battle of the Strong," the interest becomes greater, and F. Hopkinson Smith's "Caleb West" draws to a close with all the power which marked its inception and development. Poetry, short stories, book reviews and the Contributor's Club, not by any means the least interesting of the *Atlantic's* interesting matter, go to make the February number a most excellent one of an excellent magazine.

In the *Ladies' Home Journal* for February, the various departments are well stocked with useful and readable editorial contributions. The individual articles are also full of interest to readers of every condition. Hamlin Garland's delightful story, "The Doctor," is continued, and "The Inner Experiences of a Cabinet Member's Wife" are as entertaining as ever. The cover design of the February number is a drawing by Charles D. Gibson, in which he portrays his own child.

The February number of the *Canadian Magazine* is a special Klondike one, and contains a number of illustrated articles on what seems to be the Eldorado of Canada, which are well worth the reading. Among the many other interesting articles may be mentioned, "The Modern English Girl," by Sarah Grand, "The Fenian Invasion of 1866," by John W. Daffoe, and "The Ursulines of Quebec," by Arthur G. Doughty. The *Canadian*, though thoroughly national in tone, is making a place for itself among the many good magazines of the day, and deserves the support of all Canadians.

Current History has changed hands and is now the property of the New England Publishing Company, Boston, Mass., who will continue its publication along the lines heretofore followed. The new owners of the magazine will spare no effort to maintain the high standard this useful quarterly has so long had for comprehensiveness, clearness, impartiality and reliability. In the number for the fourth quarter of 1897, the same treatment of all subjects of general interest concerning all parts of the world may be remarked. The biographical sketch of the late Charles A. Dana is appreciative of that remarkable journalist. Among other subjects discussed are "The Behring Sea Dispute," "The Hawaiian Question," "The Cuban Revolt," "The Klondike Gold Fields," "The Situation in the Orient," and a host of other matters relating to events which occurred during the last quarter of the year 1897. The editorship continues in the hands of Dr. A. S. Johnson, who has done so much to give to *Current History* the general character which makes it so valuable as the record of a world's history.

ELEMENTS OF NATURAL PHILOSOPHY, by Edwin J. Houston, M.A., Ph. D., and published by Eldredge and Brother, Philadelphia, is a new and revised edition of a work which has already been well received by the teachers of Science. The book treats in a clear and comprehensible manner of Matter and Energy, Fluids, Sound and Light, Heat and Electricity, and the subject matter is exceedingly well illustrated by means of numerous cuts and diagrams. The Metric system is used in connection with the English system, in such a way as to make the learner familiar with the former, a knowledge of which is becoming of more and more importance to students of science.

Official Department.

NOTICES FROM THE OFFICIAL GAZETTE.

His Honor the Lieutenant-Governor has been pleased, by order in council dated the 20th of December (1897), to detach from the school municipality of Saint-Bernardin de Waterloo, in the county of Shefford, the following lots, to wit: Nos. 686, 688, 690, 822 and 826 of the township of

“Shefford” and annex them for school purposes to the municipality of “Saint François-Xavier de Shefford.”

Such annexation to take effect on the 1st July next, 1898.

13th January, 1898—To make the following appointments, to wit :

School Commissioner.

Melbourne, Richmond, Mr. William Morrison, to replace Mr. Robert A. Ewing, absent.

School Trustee.

Upper Litchfield, Pontiac, Mr. Francis Murtagh, to replace Mr. Paul McNally, whose term of office has expired.

20th January.—To annex to the “city of Montreal,” for school purposes, “Saint Denis ward,” of the said city of Montreal, with the limits assigned to it as such ward. This annexation to take effect on the first of July next, and to apply only to Roman Catholics.

To erect into a school municipality, under the name of “Robertson and Pope,” county of Ottawa, the following territory, to wit : The township of Robertson, throughout its whole length, on ranges I, II, III, IV, V, VI and VII, and the twenty-four first lots in the township of Pope, on ranges II and III.

This erection to take effect on the 1st of July next.

His Honor the Lieutenant-Governor has been pleased, by an order in council dated the 21st of January last (1898), to appoint Mr. E. H. Taylor, merchant, of the city of Quebec, a member of the Protestant school commission of the city of Quebec, to replace Mr. George Lampson, resigned.