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Editorial

Home-work.

BY special permission of Hector Charlesworth, Editor of "Saturday Night," we are privileged to reprint in this issue an article which recently appeared in that well known weekly dealing with the subject of Home-work. The contribution, entitled "Enslaving the Young Idea," is from the pen of Adrian Macdonald, Peterborough Normal School, Ontario, and is a striking indictment against practices which prevail in varying degrees in many of the educational institutions of the Dominion. It has, in consequence, been the subject of much comment, both from teachers and parents.

Our object in bringing it to the attention of all of our readers is that it might lead to a full study of the problem, both by individual teachers, and also by Local Associations, and that through the Educational Research Committee of the Federation some definite conclusions of practical value may be obtained on the subject.

As a starting point for such study may we suggest the following broad principles:

(a) Homework should give an opportunity for the backward pupil to "catch up" on the work, and for the brighter pupils to enrich their knowledge by outside reading, by additional studies such as music, art, etc., and by the pursuit of hobbies.

Therefore home-work assignments should not be uniform for all the class, nor should they cover essential minimum requirements, or new work, which ought to be mastered in the class-room.

(b) Periods of supervised private study should be provided for in all school time-tables, and much of the present home-work should be done during such periods, when the pupils would be able to seek the guidance of the teacher in case of difficulties.

There are many considerations which enter into the question, but we feel confident that a real solution can be found through the combined efforts of the teachers of the province. We shall be glad to receive comments or contributions arising from Mr. Macdonald's article.

Federation Membership.

As will be seen from the statistical summary, our membership to date is most satisfactory, for we have over half of the Federation year still ahead of us. We wish to thank all members, who have renewed or enrolled for the present year, and also to express our sincere appreciation of the fine work accomplished by the various Staff Representatives, and Officers of Local Associations.

The Federation's work this year has been of great importance to every teacher. Several vital problems have been, and are, under consideration. Excellent success has been achieved, due to the solidarity and strong support given by an enlarged membership to those who are called upon to lead in conferences and negotiations. We are confident that our objective of 2500 members will be reached this year, and to this end we would ask for the co-operation of every teacher.

J. G. LISTER

These massive structures grew from out his dream;
His scholars were his glory and his pride;
Their manly progress was his constant theme;
And smaller folk were silent at his side.

Yet not on buildings his brave soul was spent—
In half a century these will still remain,
Or maybe longer. Men will stand attent
To hear of how he lavished heart and brain.

But from these gates an army will emerge
Young and well-furnished to attack the ill
By which our land is troubled, and his urge
Shall still be with them, shall attune their will.

No more his step shall echo through these halls,
From days of toil he finds a sweet release,
But from his life a great example calls
To us in sorrow. May he rest in peace!

BERNARD MCEVOY,
in the Vancouver Daily Province.

J. G. Lister

THERE are times in the lives of all of us when, by reason of profound sorrow, we find it humanly impossible to give any expression, either by spoken or written word, to the deep and sincere emotions which arise in our innermost souls. At such times silence is far more fitting and infinitely more significant.

This was the experience of a large number of the citizens of British Columbia when they learned of the passing, after a brief illness, of J. G. Lister. It was particularly the experience of his colleagues in the teaching profession, many of whom prized his personal friendship and association so highly, as has always been evidenced by their frequent reference to him by such familiar and genuinely respectful titles as "J.G.," "Dad," "The Chief," etc.

In a very special sense, it is our experience as we seek to pay tribute to him as a man, a teacher, a leader, and a friend, and yet, though we realize our efforts will be totally inadequate, we, nevertheless, must record some of the outstanding accomplishments of his brilliant career, and acknowledge the debt of gratitude we all owe to him for the great contributions he has made to the advancement of education generally, and to the improvement of the teaching profession in our Province.

He was a man of sterling character, whose integrity and sincerity of purpose were unquestioned. He had a great mind and a remarkable faculty for logical, scientific thinking. (Along certain lines he bordered on genius). In addition he had a wonderful facility in the power of clear and concise expression, which enabled him to convey readily to others the results of his own thinking. His platform presence and his ability as a speaker were recognized on all sides, and he gave most freely of his talents in this connection, always being willing to help forward by his advocacy any movement for the public good. He, at all times, had the courage of his convictions and was bold and fearless in defence of them.

Combined with all this, he was intensely human and possessed a never-failing sense of humour even in times of difficulty and trial. He always retained the spirit of youth, and radiated an optimism and enthusiasm which infected and encouraged all with whom he came in contact. His interests were not confined merely to those of his chosen profession; he had numerous contacts with civic, industrial, commercial and community affairs, in all of which his co-operation and counsel were highly valued. The presence at his funeral service of so many representatives from these various fields, as well as his many teacher friends, bore ample testimony to the general respect and esteem in which he was held.

It is often said that teaching is the noblest of all professions. Whether this be true or not of the profession as a whole, there is not the slightest doubt that it is true of all such teachers as J. G. Lister, who was a teacher in the highest sense of the word. To him, teaching was not merely a matter of scholarship, qualifications, and experience, nor was it a matter

of the mere imparting and acquisition of knowledge. Such things were but part of the profession of teaching. The main consideration was above and beyond these, and lay in the development to the highest possible degree of the latent possibilities of every individual pupil committed to his care, and particularly in the building up of character and citizenship. In this connection, progressive teachers everywhere know that he was right.

Many of his former students, now holding highly important positions, willingly ascribe most of their success to his great influence. Among his cherished possessions were many appreciative letters and messages from fathers and mothers whose sons had been great problems to them until they had sought and obtained, from time to time, the practical advice, counsel and co-operation he was always so ready to give.

If the true greatness of a teacher can be measured by the genuine respect accorded to him by his students, then Mr. Lister was pre-eminently great. This was abundantly evident in connection with the impressive rites when so many assembled to pay their last homage. A large number of ex-students stood in line outside of the church, not gathered or marshalled as an organized group, but just assembled as a group of individuals without any leader, but with one common idea and incentive of paying deserved tribute to the memory of one who had meant so much to them.

As a climax to such examples of tribute, came that accorded to him by the students and staff of the Technical High School. Following a special memorial service, conducted by his old friend, the Rev. J. S. Henderson, in the school auditorium, they lined up on either side of the road in front of the building, and stood with heads bowed in reverent respect. The King's colour and the School colour were dipped in salute. As the funeral procession passed between the lines and halted for a brief moment, all remained silent and immovable. It was impressive beyond description. Always intensely and justifiably proud of "his boys," and particularly of the fine spirit which always prevaded them, this last function, though inevitably sad, was carried out with such perfection and dignity as he undoubtedly would himself have desired. Surely one who can merit such a glorious final tribute has not lived in vain.

In three fields particularly Mr. Lister was an acknowledged leader. His leadership in the British Columbia Teachers' Federation is so well known and recognized as to require no more than brief mention. He was the moving spirit in connection with the first organization of the Federation and has always been accorded the honour and distinction of being regarded as its founder. He was the President of the Federation during its first two years, in 1917 and 1918, and was elected again for a further term in each of the years 1920, 1921 and 1922. He has been a member of the Executive continuously since the inception in 1917, and was elected to the double honour of "Life Membership" of the Federation and "Life Membership" of the Executive on April 5th, 1923. Right throughout his valuable advice has always been available, and he has done much to guide the Federation along the paths which have led to such great success. In the early days the Federation was not regarded with the general

favour and support now accorded to it, and in such days those actively associated in its leadership were looked upon with a certain amount of suspicion as being of a radical or revolutionary turn of mind. Mr. Lister, however, was one of those few pioneers who took this and other personal professional risks associated with the launching of the new type of teacher organization. He was a staunch and fearless advocate of teachers' rights at all times, and was frequently the spearhead and spokesman in conferences and negotiations which resulted in advantages to the whole teaching profession.

He was fully aware of the fact that, in fighting the battles of others, he not infrequently aroused enmity and created difficulties for himself, but such was his love of fairness and justice that he counted any such considerations as unworthy of attention, and refused to be turned aside from his ideals. Vancouver teachers particularly owe much to the work of Mr. Lister, for he was for many years President of the Vancouver Teachers' Association, and did much to make the Association a real factor in the educational work of the community.

He was also one of British Columbia's delegates present at the inaugural meeting of the Canadian Teachers' Federation, held in Calgary in 1920, and attended several subsequent meetings of the Dominion organization.

Mr. Lister is again rightly known throughout this and other provinces as the "Father" of Technical Education in British Columbia. His was the mind behind the movement, and he carried on a constant and persistent campaign to educate the public and the authorities to the necessity for such a department in our educational system. In 1916 the first definite step was laid when the Vancouver School Board opened a Technical Department in the King Edward High School. The course rapidly grew in popularity and it became necessary to establish the work in a separate school, the former Labour Temple of the city being converted into a Technical High School.

His crowning ambition was achieved, however, when the present Technical High School building was opened. To the planning and organization of this magnificent school he gave his full thought and energy. Few will ever know the sacrifice of time, energy and strength which this entailed for him. He never spared himself, for this was to him the concrete crystallization of a long-cherished vision.

His school has won the admiration of numerous visitors from many parts of the world. He took the keenest delight in receiving such visitors, and in showing them through the institution. It became, in truth, a vital part of himself; he lived for the school and for his boys. The school and its graduates will always constitute a fitting and abiding monument to his memory.

His ability for leadership was again recognized in connection with the National Council of Education's work in Vancouver. For seven years he was Chairman of the Local Committee of the Council, a position he occupied with conspicuous success, and which he relinquished only a

few weeks ago. When the last National Conference was held in this Province, his duties became exeedingly onerous, but he fulfilled them with that thoroughness which characterized all his work. It is not too much to say that the success of the Council's work in Vancouver has been largely due to him, and it is pleasing to recall that his successor in the office of Chairman courteously gave him the credit for such success at the recent lecture held under the Council's auspices.

Throughout his long service in this Province, Mr. Lister made a host of firm and loyal friends, both amongst his professional colleagues and in the general community, and all such have felt his friendship to be a rare privilege. By these he will be greatly missed. Those who have served with him on the Federation Executive particularly will feel a keen sense of personal loss. It will indeed be strange not to have him present with us again in person, but we know that the influence and inspiration which we have always felt in the past will remain with us and will be an added incentive to us to carry on the Federation's work so that it may bring the whole profession still nearer to those high ideals of service so well exemplified in his life.

As was so eloquently said by the Rev. W. Cooper, to the large congregation of friends present at the service at St. James' Church, no more fitting summary of J. G. Lister's life and work could be found than the concluding sentence of the lesson read by him: "Be ye steadfast, unmovable, always abounding in the work of the Lord, for as much as ye know that your labour is not in vain in the Lord."

To his widow, to his son, Mr. H. Norman Lidster, and to his daughter, Mrs. Freda Engley, his passing is an irreparable loss, but they must have found great consolation in the knowledge that they had such tributes of sincere sympathy from so many people in all walks of life, who felt with and for them in their hour of sorrow. Amongst those who so sympathize are the Executive and members of the British Columbia Teachers' Federation, who had accorded him, in life, the highest honours within their gift, and to whom the memory of his virile and genial personality will always remain as an inspiration.

To Mrs. Lister he owed much of his success, for she was at all times a source of encouragement and inspiration to him. She shared in a very especial sense in all his work and activities. She never begrudged the tremendous amount of time he gave to public and professional service, and was always ready to make sacrifices herself in order that he might continue on such work. We are all deeply indebted to her, for in this indirect, though none the less vital way, she has made an invaluable contribution to the progress of the community generally, and to the good of the teaching profession particularly. We shall not forget, and she will always be sure of a warm place in the affection of all British Columbia teachers.

F. H. Dobson

ON December 5th the teaching profession of the province lost one of its outstanding men, in the person of Frank H. Dobson, who, for the past twenty-three years, has been a valued member of the staff of the Vancouver schools. He was widely known among the teachers of this province through his close connection for so many years with the work of the Vancouver Normal School, and scores of its graduates who came in touch with him there will learn of his passing with the deepest regret.

After graduating from the University of Toronto, in 1902, he went to Edmonton, where he was principal of the Strathcona School for a time, and later joined the staff of Alberta College. On coming to Vancouver, in 1907, he occupied in succession the positions of teacher in Dawson School, vice-principal of the Model School, then principal of Grandview School, and, later, of Strathcona School. He was appointed principal of the Model School in 1912, which position he has occupied with remarkable success for the past eighteen years.

Both at University and after graduation Mr. Dobson took a keen interest in games and sports, and he himself was an athlete of more than ordinary ability. In his younger days he specialized in track events; later he played baseball, lacrosse, ice hockey, and tennis; while in recent years he became an enthusiastic follower of golf. Naturally he took great interest in school sports, and gave considerable time to coaching pupils in their various games, in which he always upheld the highest ideals of sportsmanship, as he did in the game of life itself.

He was a man who brought to bear on his work high scholastic attainments coupled with a genuine love of teaching, and hundreds of pupils who passed through his hands will bear witness to the fact that his unsparing efforts in their behalf, his high ideals, and his kindly sympathy have left a lasting impression on their lives.

Known as a man of sterling character, his incisive logic and sound judgment won for him the greatest respect among his colleagues. A few years ago the teachers of the city honored him by electing him President of the Vancouver Teachers' Association, as a mark of their esteem and confidence. He also served as a member of the Executive of the Provincial Federation. Those who knew him best will ever revere him in memory as a skilled teacher, a wise counsellor, a good sportsman, and a true friend.

Our deepest sympathy goes out to his sorrowing family in their loss of a loving husband and father.

Matriculation Examinations and Accredited High Schools

By A. S. TOWELL, *Supervising Principal, Nanaimo, B. C.*

(Continued from November Issue)

Judgment by Examination Results

Since the school and the teacher are both judged, under present conditions, mainly on examination results, teachers are forced, regardless of all other considerations, to coach and cram their pupils, to pound and drill the prescribed subject-matter into them. University professors protest that they are absolutely opposed to such methods—that on the contrary they want pupils to be trained to think for themselves; but such protests are vain so long as examinations are such that they cannot be passed without protracted and intensive drill, and so long as the teacher **has** to get his pupils through or be branded a failure. What about socializing the students, vivifying the subject-matter, instilling a love for the subject and a desire to pursue it farther, and so on? There are a few inspired teachers who can achieve these results and at the same time get their pupils through the examinations, but they are indeed few. All too often, on the contrary, we have teachers who have no broad culture and little inspirational power, but who are nevertheless cramming experts; they know the prescribed text almost by heart, but little outside it; they are domineering enough to make the student spend far too great a proportion of home-study time on their particular subjects; they have a crowd of weaker students doing extra work after school every afternoon. Such teachers work hard we admit, but what mis-spent effort! Drill, pound, and review! Yet they get the desired results, and are in some quarters lauded as being the best teachers we have! And the tragic thing is that young beginning teachers find themselves relentlessly driven by the inexorable pressure of examinations to adopt just such methods. What of the weaker pupils who cannot help being dull, but who are hounded, scolded and bedevilled, sometimes to the point where they are simply driven to leave school? What of the pupils who have reached Grade X., but have got stuck there until they have left school completely discouraged? What of the cost in time and discouragement to such pupils, and in money to their parents and the taxpayers? There are rumors of school principals whose solicitude for examination results is so great that they habitually coerce their weaker Grade XI. pupils into postponing for a year any attempt to write Matriculation. As an instance of what is meant there may be quoted two cases, occurring some years ago when all Grade VIII, pupils wrote the entrance papers, of two elementary schools of some 500 pupils each: the first sent up 22 entrance candidates, of whom all passed with excellent marks; the second send up 83 candidates, of whom 67 passed, but with a much lower average mark. Yet the first principal was highly complimented on his 100 per cent. pass and his splendid average mark, while the second was hauled over the coals for poor results! In reality the first man was not fit to hold his position.

There are High Schools in this province which get splendid Matriculation results, but which have a very bad record of pupil elimination in Grades IX. and X. Such schools are not good, they are very bad; yet they receive high praise from critics who look no deeper than to superficial and misleading examination results for a basis of judgment.

As long as the examination system continues, so long will the school be judged on examination results. There is nothing else definite enough to serve as a criterion; the objectives at which we ought chiefly to aim are so remote and intangible that the lay mind can hardly grasp them. And since the examination system in some form seems likely to persist for a long time to come, the need of investigation and reform is all the more urgent and pressing.

Examinations Highly Unscientific

The last argument to be brought forward here against our present matriculation examinations is that they are highly unscientific. This statement is almost too obvious to need substantiation, but one or two facts may be mentioned.

It is a commonplace of statistics, and it is perfectly sound, to say that when the number of candidates annually runs well into the thousands (2451 in Junior Matriculation this year), and that these are distributed over many schools, the sampling is wide enough that the standing and ability of any one year's candidates will average practically the same as another years; the percentage of failures, meaning those who neither passed nor were granted supplements, should remain virtually constant.

But what are the facts? This year about 30 per cent. failed; in 1924 only 12½ per cent.; in 1920 again 30 per cent. The intervening years show all sorts of percentages between these extremes. Well over twice as many candidates failed in 1920 as in 1924. Why should this be so? To say that the candidates were much better prepared in 1924 than in 1920, but that again in 1930 they were as much worse prepared, is patently ridiculous.

In Senior Matriculation the situation is worse. The failures in 1917 were 8 per cent.; in 1919, 23 per cent; in 1922, 10 per cent; this year they amount to no less than 54 per cent. There is neither rhyme, reason, nor logic in a situation like this!

It is grossly unfair to both teachers and pupils. How on earth is a teacher to know what standard of preparation will satisfy the examiners when the standard fluctuates wildly from year to year? As for the pupils, one year a given student passes, but next year an exactly similar student fails. This is rank discrimination and is utterly indefensible.

All that has been said regarding wildly fluctuating standards applies not only to the examination as a whole, but even more to individual subjects. What is the inevitable result? The teacher must prepare if he can for the worst that may happen—for a paper which

will be characterized in later discussions between teachers and unfortunate pupils as a "holy terror." Whether the pupils achieve education in Dewey's sense of the word has to be discarded; they must be got through if driving and drilling will get them through.

Perhaps when the fatal day arrives the paper turns out to be easy; in that case the teacher gets a pleasant surprise and his pupils are lucky. But somewhere a professor is deciding that too many passed; the next year's paper is made much harder, and the unfortunate candidates are slaughtered right and left for no other reason than that they were unlucky enough to have reached Grade II. in the year 1925 instead of 1924! What justice is there in penalizing a pupil merely because he happened to have been born in 1908 instead of 1907?

Motivate the Teachers

The above is far from being the only respect in which the papers are unscientific and unsatisfactory. Every year there are questions set which cannot be answered; questions having nothing to do with the course of study; or questions which can be answered by students who happened to study out of one text but not by those who studied the alternative text prescribed. Yet these papers are set by professors who rail at the high schools for turning out students who do careless work! Annually attempts are made in the marking to rectify these mistakes, but restitution cannot be made. Many pupils become panic-stricken and "blow up" when confronted with a paper containing such questions, but just which of the failing pupils these are can be discovered by no one who is not gifted with second sight.

One question in a recent paper was correctly answered by only **one** pupil in the whole province. As an examination question this question was completely valueless in so far as it is the function of an examination to distribute the pupils in order to discriminate between various levels of ability. Yet it was warmly asserted to the writer that this was a good question! The only possible basis for such an assertion must have been that to flunk every pupil but one in the whole province would teach the **teachers** a good lesson, and that in future they would have learned to pay a little more attention to that type of question! In other words, a main function of the Matriculation examination is to motivate the teachers and to show them what they ought to teach; and the means by which this information is conveyed is to slaughter unfortunate candidates right and left! Surely this is a ridiculously expensive method of showing what parts of the subject-matter should be carefully taught. The thing needs only to be put in the above light in order to show its absolute absurdity.

Again, the distribution of the marks earned by over two thousand students in a subject should fall at least roughly according to the normal probability curve, skewed somewhat to the right perhaps in the case of Grade XI. pupils. One set of marks this year falls into two clusters, one in the 60's and 70's and one in the 30's and 40's, with only a sprinkling of cases in between.

Summary

To sum up, the Matriculation papers have neither validity nor reliability, using these words in the technical sense. They are subject to all manner of chance factors; their prognostic value is admittedly small. Those who doubt these assertions are referred to the investigations of Thorndike, Colvin, Brown, Starch, Whipple, and others. It is useless to multiply instances further; enough has been said to show that, although every precaution is taken to ensure that marking is done as carefully and as fairly as possible, the results of the whole system simply cry out for something to be done. Conditions are intolerable.

It seems to the writer that a fundamental cause of the whole trouble is that the matriculation examination has been trying to do simultaneously two things which are too incompatible to be done at the same time. The two things are these: First, in so far as it constitutes a High School Leaving Examination (and that is what it is for most pupils) it sets up a level of achievement which must be surpassed by the pupil before he is deemed to have successfully completed his high school work; secondly, in so far as it is a University Entrance Examination it sets up a level of achievement which the pupil must surpass if he is to be deemed fit to undertake college work. The first of these two standards ought to be such that the average pupil can attain it; the second of them is set by the university, and it may be much higher than the first.

We now see one reason at least why 8 per cent. of Grade XII. students fail one year and 54 per cent. another. So many University freshmen failed last year that the paper must be made harder this year; and then so many Matriculation candidates fail this year that for fear of a public outcry the paper must be made easier next year. So it goes, wavering back and forth between the two standards and failing miserably to achieve either one. The two functions **cannot** be performed by one examination. Add to this the fact that nothing could be more unscientific than for a man to sit at his desk for an hour or two and set down a series of six or eight questions which he imagines will constitute a satisfactory examination, and you have sufficient cause for the present widespread dissatisfaction.

In view of the fact that after next year the new high school course of study will be in full effect, the writer may be accused, in regard to what he has said thus far, of flogging a dead horse. He cannot, however, agree with this view. Unless we become alive to the situation things will go on much as before; the same examinations will be set by the same people in the same way for **both** High School graduation and University matriculation. This simply will not do; things would remain as bad as they are, and that must somehow be prevented. Now is the critical time, when new precedents are being established.

The writer will be accused, too, of having shown things in too dark a light. He admits that he has dwelt on the faults of the system

to the exclusion of any virtues it may have; his reason is that he thinks few people, even in the High Schools and much less outside them, fully realize how deplorable the consequences of the system are. There are even High School men who will defend the present plan—men who, while admitting that it is not perfect, will maintain that it works pretty well on the whole. This not uncommon attitude may be attributed to one or a number of causes: some High School teachers are skilled examination crammers and realize subconsciously that they get better results under present conditions than they would under others; some are sufficiently ignorant of educational theory to believe that the main purpose of a secondary school is to drive subject-matter into children's heads; some, by long use and custom, have come to accept and then to defend the system as being of the nature of things—as being the proper and obvious way of dealing with pupils who have reached the end of their High School course. One reads Dewey or any other sound writer on the principles and philosophy of education, and one sees what education ought to be. The condition that exists in British Columbia High Schools today is in rather appalling contrast.

Thus far in this article the criticism has been destructive. What is there of a constructive nature to be suggested?

Constructive Suggestions

There is much. In the first place the High School graduation examination should be left solely to the High Schools and to the Education Department, to be conducted in a manner satisfactory to both. The University has too long called the tune to which the High School has had to dance, and it will, of course, claim no voice in regard to this matter. The main thing to be guarded against is using the same examination for both High School Graduation and University Matriculation, which on account of the differences in standard would, as shown above, perpetuate the conditions we have been criticizing. Yet this very thing will happen if we do not take care.

The chief question with which this article is concerned is, however, what shall be done with those of our secondary pupils who are candidates for admission to the University, and in regard to these the college authorities will, of course, have a say. There are those who will maintain that the college authorities have the **sole** right of dictating their own entrance requirements. At present they may possess this right, but the whole first part of this article constitutes a challenge to the wisdom of permitting the right to remain exclusive.

There are two ways in which the University can select those students whom it will admit to its courses: It can select them by a Matriculation examination, or it can accept the pupils recommended to it by a system of accredited High Schools. Let us consider these two in the order in which they have been mentioned.

We may at once admit two things: first, that there will remain, in any event, some form of University entrance examination, for the simple reason that not all High Schools can possibly become accred-

ited, at least as far as we can now foresee; secondly, that very many of the objections with which this article has thus far dealt are objections not to Matriculation examinations in themselves but to Matriculation examinations as we have them here and now. The fault has been more with the way we have been operating the system than with the system itself. The writer would like to explain here that if it be thought that he has rather indiscriminately condemned the attitude of the University, no such condemnation was intended and he has conveyed a false impression. He is well aware that many of the professors are keenly alive to the present situation and are as eager as he is for reform. They will also be as eager as he is that the reform be left in the hands of those competent to carry it out.

A Basic Principle

To resume, there is a basic principle involved: it is that the desire of professors to have their incoming students well prepared for advanced study in their particular subjects must not be allowed to interfere with the best educational interests of the secondary schools. In the past it has seriously interfered; much harm has been done to boys and girls— more harm than has been generally realized. It has been charged that High School pupils have not been taught to study. Of course they have not! The teacher dare not take the necessary time. It takes longer to train a boy to study for himself than to cram him full of subject-matter, and the teacher has been forced into a desperate anxiety to do the latter. Whatever happens the course must be covered, the subject-matter must be reviewed ad nauseam, or the pupil will fail! It is useless to urge that if only the pupils were trained to study, they would in the end save time and be better prepared for examination; the teacher is faced with a course and a class and an examination, and as the year speeds on he is driven by a more and more desperate desire to get the first thoroughly pounded into the second so as to prepare as best he may for the third!

If those who are in authority would only give the schools a chance to demonstrate that a pupil who has been trained to study, who has read extensively rather than intensively, who has developed a real interest in his subject but who is perhaps not quite so crammed with information, would be better college material than the present product of our schools! There will be those, solicitous for the "maintenance of standards," who will accuse this of being a plea for mere superficiality. On the contrary it is here maintained that the present system defeats its own end ,namely, sound scholarship.

Definite Reforms

As to more definite reforms: the present examination board should be reconstituted; it should be headed by a permanent departmental official who has had thorough training in mental measurement and in statistical procedure; its members should also have had training in these matters and at least a few of them should be thoroughly well versed in the mathematical theory of statistics; above all

none of its members should be advocates of formal traditional methods whose minds are closed to anything new, they should be wise and conservative progressives. (And that is precisely what each one of us thinks he is!)

Further, there should at once be started a full and careful study of all that has recently been done, by the American Council on Education and others, to investigate various procedures and criteria for selecting college material from our secondary population. This study, moreover, should be a continuous one and could well be carried on under the direction of the permanent departmental official mentioned above. Other duties of this official could include the administration of a provincial bureau of measurements analogous to the one now in operation in the city of Vancouver.

By such means a much improved Matriculation examination could be provided within a year or two; and the results of the research might well show in the end that the best and highest prognostic value would be attained by a combination of a subject-matter test, an intelligence test, and as scientific an estimate as possible of the candidate's character traits. And, provided that the subject-matter tests are of a kind that cannot well be crammed for, we shall find that High School teaching methods will gradually improve. But only gradually, it is to be feared, for habits formed under the present system will be too deeply rooted to be easily broken, and in any event not all teachers read educational literature or take educational courses.

Accredited High Schools

There remains to be considered the possibility of initiating a scheme for accrediting certain High Schools in this province. This has been successfully done elsewhere, and it is hard to see why it could not be done here with equal success. In fact, to insist on the feasibility of accrediting at least a few High Schools is really a work of supererogation; on the contrary we should find those who are opposed to the idea and challenge them to give one single valid reason why certain of our High Schools could not be accredited.

The scheme is feasible enough; but whether or not it is desirable is quite another question. In fact, if our Matriculation examination were made what it might be there would be no special reason for bothering about accrediting. It is safe to say that it was the deplorable effects of the traditional college entrance examination which started the agitation for accredited High Schools in the first place; it was the only apparent way for secondary schools to escape being longer shackled by the dominance of the college entrance aim. Yet it is easy to see that an accredited school, given time to adjust itself to its freedom, might, under wise leadership, accomplish great things.

Again, the new High School course of study lends itself much better to some system of accrediting than to a system of external examinations. This notably the case, as was pointed out above, in those subjects where the grade in which they were taken is optional.

But the final, clinching argument for accrediting its this: there is no immediate prospect that the Matriculation examination will, in fact, be made what it ought to be. This consideration settles the matter, it leaves no doubt as to what should be done.

Accrediting Authority?

This being granted, the next question—a thorny one—is, what authority shall do the accrediting, the Education Department or the University? The only valid answer is that the two must work in conjunction; but the final authority must rest with the Education Department for two reasons which are both conclusive. In the first place the Department is the supreme educational authority in this province. In the second place High Schools are public schools; they are controlled and administered by the Department and not by the University. In the past, nevertheless, the whole life of our secondary schools has been dominated by University entrance requirements; and we must repeat what was said above, that preparation for college is not even mentioned among the cardinal principles of secondary education. The condition has not, of course, been the fault of the University particularly; it has been the result of circumstances. But the fact remains that one of the reforms to be achieved is to release the High School from University domination, and to vest the accrediting authority in the University might well be, as far as the High School is concerned, to jump from the trying pan into the fire. It would tend to perpetuate a type of secondary school whose curriculum and whose teaching are determined and circumscribed by the schedule of Matriculation requirements.

Yet the University's interest in the matter is too great to be by any means ignored; and so it must be granted powerful but not predominant representation on the accrediting committee. The final authority must remain, however, with the Department, whose responsibility and whose duty it is to see that the High School is left free to do its proper work.

Basis for Accrediting

A further point to be considered is the basis upon which a school shall be accredited. This involves so many considerations that it would require a separate article to deal with it. All that will be mentioned here are a few of the leading points: that means will have to be found for insuring that the standards of one school are as nearly as possible equal to those of another; that the staff of the school, and especially the principal, shall possess qualifications satisfactory to the accrediting authority; that the laboratory equipment be adequate;, and so on. Also inspection of the High Schools would have to be more thorough and more detailed than it has hitherto been, and part of it would naturally be done by the University. There would have to be more inspectors, and they should be trained men.

But in deciding all such matters there is now a large body of experience on which we can draw. The procedures and history of the North Central Association of Colleges and Secondary Schools and of other similar bodies should be studied.

It will be objected that under an accrediting system principals will tend to recommend pupils too freely, so that standards of scholarship will be lowered. In answering this it must be, of course, admitted that principals, being human, will make mistakes; this cannot be avoided. But what about the mistakes made by the Matriculation examinations?

There is, however, a much more conclusive answer to the objection: the privilege of accrediting can not only be granted, it can be taken away. This fact will automatically ensure great caution on the part of principals, for it would be professional disaster to any man if through his fault the privilege were withdrawn from his school; he would be discredited possibly beyond hope of rehabilitation. It might even turn out that fear of this may induce some men to refuse to accept the responsibility. Such men are, of course, in any case not fit for it.

It was remarked above that if the Matriculation examination were what it ought to be, we should not need to worry much about accrediting schools. In saying this the writer had in mind certain considerations which are pertinent to the whole question. The results of the present system have been depicted in dark colors, yet it possesses certain values which one would be loth to see lost. It does set up certain definite requirements and provide a strong stimulus to meeting them; it does serve as a useful club to drive pupils to work much harder than they otherwise might at acquiring information and certain technical skills—although in this last regard its activities have been, like those of Eustace, the genius of "Alf's Button," a bit too wholesale! Without it there is grave danger that slackness may creep in. It is unfortunately to be feared that if, for instance, High Schools were permitted to grant Graduation certificates (not Matriculation certificates) as freely as they wished, there would be a letting down. Many principals and teachers are not ready for too much freedom in this matter; in fact without the rigidly prescribed standards and curricula at present imposed by external authority they would be quite at sea.

Real Hope for Better Things

Let it be stated quite plainly that these facts are not arguments for the retention of the present system; they are, however, arguments for the retention of a greatly improved form of the present system. And since, whether or not some of our schools are accredited, there will remain many schools subject to external examinations, the need for drastic reform of those examinations is, as was emphasized above, urgent and pressing.

The facts are also arguments for better inspection and closer supervision of those schools whose principals are not trained, experienced and reliable men. And, fortunately, to offset these, there are principals in whose hands the welfare of their schools is abundantly safe—men who could do great things if only given the opportunity. These last are the men in whom lies the real hope for better

things in our secondary schools. The reforms that have been advocated in this article will not in themselves accomplish anything positive, but by removing shackles and hindrances they will give opportunity for positive things to be accomplished. The setting up of rigid standards does keep the slacker up to the mark, but it also tends to hold back the man who is capable of better things; the minimum standard is all too apt to become also the maximum. The accrediting system would correct precisely this drawback, for it would liberate the good schools and let them go ahead while the poorer schools, as at present, would be held up to the prescribed requirements.

Time will be required, and faith, and a better quality of educational leadership from inspectors and University professors. There are good men in charge of some of our High Schools; let them be trusted, let them be given opportunity, and they will do things which others will study and copy, and we may yet see a transformed secondary school system.

The principals are the key men. They are administering the schools, interpreting the curriculum, supervising the instruction, guiding and advising the teachers. The Department may issue a new course of study, the University may decide to accept the idea of the accredited school, but it is the principals alone who, in the last resort, can make the High School what it should be.

Ramblings of Paidagogos

School Boards.

IT is only by the exercise of uncommon will-power that Paidagogos has screwed up his courage to speak of School Boards at all. There is an awe-inspiring proximity about them, a species of divine imminence, which pervades the whole school from the sanctum of the principal to the nether abode of the janitor, reaching in some cases even to the manual training centre. Had Shakespeare been alive today, and a member of the teaching profession, he would doubtless have spoken of "the dread and fear" of School Boards; because the "awe and majesty" formerly attributed to kings, would have been seen by him in all their pristine glory on such occasions as he waited upon the Board.

Yet, strangely enough, this rather breath-taking dignity does not attach to members in the pursuit of their daily avocations. At these times they are to all appearances ordinary men,—plain men of business, struggling like the rest of mankind to acquire a competency or to satisfy their employers. But the Board as a corporate entity transcends all such mundane limitations: there seems to be something in the atmosphere of a Board room which endows the Board with weight and gravity, and which brings a certain finality to its deliberations.

It is a curious thing that no degree of practice can ever make the average principal comfortable in a Board room: he may have attended meetings of the Management Committee for twenty years, and he may know every trustee by his first name, but he will never feel at home. The grocer and the doctor and the coal merchant, with whom he played bridge on the previous evening, have become remote portentous figures, and the dry goods salesman, whose boy failed to receive promotion to Grade Three, is a problematical emissary of doom. The principal listens to the discussion with an uneasy intensity, wondering, like Damocles, when the blow will fall; he sits forward in his chair, or leans back with a simulated nonchalance which would not deceive a child, and mentally runs over the flaws in his administration, every one of which gradually widens to a yawning chasm wherein he may be engulfed.

At the head of the table, John Smith, an employee of the lumber company, sits in his capacity of Chairman of the Board. Only yesterday, the principal was told in confidence by the manager of the lumber company that John Smith had narrowly escaped dismissal on the score of several serious blunders; but for the life of him the principal cannot connect the incident with the Chairman of the Board. At this moment the Chairman is making a few weighty remarks about a lack of thought manifested by some members of the staff; and even as the principal prepares to come to their defence,

he is oppressed by an odd sense of inadequacy. As the Chairman sits there smoking his pipe, there is an inexorable dignity about him,—he is plain John Smith no longer. It is only when the Principal is excused, and gets into the outer air, that his perspective returns and he can contemplate his intra-mural emotions with a smile,—but next month he will go through it all again.

"All generalizations are false, including this one," but it is a matter of common observation that every School Board has its oracle. For the most part he is a man of the strong silent type, so dear to the heart of the Victorian novelist. He will sit for an hour consuming tobacco and holding his tongue, his face tense with concentrated thought. The other members may run on, but experience has taught him that they will eventually run down, and that the strength of his silence will finally consume their volubility, even as the lean kine of Pharoah did eat up the fat. A moment must arrive when the members of the Board will search his face for approval, and will submit themselves to his considered judgment. It is a moment well worth waiting for and he makes the most of it. With careful deliberation he knocks out his pipe, draws forward to the table, and renders the decision of the Board. The oracle has spoken, and may Heaven have mercy on the hapless trustee who seeks to re-open the discussion.

Paidagogos has often wondered why it is that ratepayers, whose representatives the school trustees frequently claim with some pride to be, are so markedly lacking in their enthusiasm for educational information at municipal election meetings. The scene is usually somewhat as follows: Upon the platform, in a huge semi-circle, sit the aldermen and the aldermanic candidates, with mayoral aspirants flanking the Chair; and behind these dignitaries, in a secondary row of little or no importance, sit the members of the School Board. Streams of impassioned oratory, which frequently overflow the crumbling banks of grammar and syntax, are received by the audience with generous acclaim or condemnation: vital questions concerned with assessment, with fire protection, with the laying of sewers, are extensively debated; the atmosphere thickens, unpleasant allegations begin to be bandied about, and the King's English is wrenched and racked in all its joints. To say that the audience enjoys this is a gross understatement of fact: the assembled citizens fairly hug themselves with delight. Especially do they revel in the remark of ex-Alderman Jones to the effect that Mayor Binks is "an unmethylated nincompoop," because this is a form of argument which everybody understands.

About ten-thirty the last aldermanic speech has been made, and the tumult dies down; so, according to ancient custom, the chairman calls upon members of the School Board to render an account of their stewardship. Armed with a sheaf of statistics carefully prepared by the secretary of the Board, the first trustee threads his way through intervening chairs, most of which are now empty, and advances to the front of the platform. His appearance there is evidently a cue of some kind, for at this point the ratepayers with one accord seize their hats and make for the nearest exit. A baker's

dozen, most of whom are in the employ of the Board, remain from motives of courtesy to the end, and to them the account is duly rendered.

Apparently the only variant of the above procedure occurs when the trustees are known to be at loggerheads. On such occasions nothing can induce a single ratepayer to go home, and it has even been known for trustees to speak ahead of the aldermen. Paidagogos suggests that, in the interests of education, every School Board stage a mock battle at the meeting prior to the election: and surely no right-minded trustee would decline to give and take an epithet or two for such a cause!

It is, of course, trite to say that trustees are a conscientious folk, serving the public without fee or reward, and that sometimes they receive more kicks than ha'pence for their labors. Some there undoubtedly are who use the School Board as a stepping-stone to so-called higher office, but these are happily few. It would be vain to deny that another insignificant group seeks election to the Board as a means of satisfying a sense of personal importance which the world has inadvertently overlooked. Motives of many kinds there must be in the very nature of our imperfect humanity, but it is nevertheless safe to say that a genuine desire to be of service is the most common.

It is not therefore surprising that in an extremely zealous trustee this impulse to serve should cause him to over-estimate the sphere of his proper activities; and this is probably what happens when he essays the role of voluntary municipal inspector. Fortunately, nobody takes him very seriously in this amateur capacity,—least of all his fellow trustees,—so that his reports carry no real weight, but he creates awkward moments for the teacher nevertheless. He cannot be got to understand that Grade Five pupils are unable to answer Grade Seven questions, and that his ordinary vocabulary is not suitable to a receiving class. He feels that there is a conspiracy somewhere to cover up glaring defects, and shakes his head ominously over the decline of education in these latter days. It is not until he has exhumed the vanishing shreads of his Latinity in the irreverent presence of a matriculation class that he realizes his deficiencies as an inspector, and he returns to his shop chastened indeed; but with his confidence in certain teachers severely undermined.

Much might be said about the misplaced enthusiasm of School Boards; about their occasional willingness to undertake the highly technical task of grading; about their readiness to guide the Education Department in all matters pertaining to the curriculum; about their supervisory interest in the habits and raiment of the teaching body. In a word, much might be said about their foibles. But Paidagogos is aware that trustees, in common with all mankind,—and not excluding teachers,—must lapse at times from the sphere of pure wisdom; and that underlying these superficial and frequently irritating lapses, there is a solid substratum of goodwill and understanding. Indeed it would not be going too far to say that School Boards should be numbered among the best friends of the teaching profession; and this is something that every teacher in his contemplative moments is eager to admit,—always presuming that such contemplation does not include his salary-cheque.

Enslaving the Young Idea

Ontario Educationist Assails the Homework Evil

By ADRIAN MACDONALD, *Peterborough Normal School, Ontario*

(*Reprinted, by Special Permission, from Toronto "Saturday Night"*).

ONE afternoon last November I arrived home from school to find two ladies taking tea with my wife. They invited me to join them. I discovered that they were talking about their children.

"I'm very much worried about Helen," one was saying. "She was perfectly well when she came back from the summer holidays, and here it is only November and she is already looking and acting like a different child. She doesn't want to play, her appetite isn't what it should be, and she cries if you look at her. I was talking to the doctor about her, and I'm almost afraid I shall have to take her out of school."

I was immediately interested.

"What is the matter?" I asked. "Is she having difficulty in keeping up with the grade?"

"No, I don't think it's that," replied the child's mother. "She has always stood well in her class, and the teacher's reports have always been favorable. It isn't the school work itself that bothers her—it's that awful homework!"

"How old is Helen?"

"Nine years old."

What grade is she in?"

"She is in the Third Book—the Junior Third."

"A child of nine years old in the Junior Third Grade with a heavy burden of homework!" I exclaimed in surprise.

"Oh, yes—they all have homework. Bobbie, who is just in the Second Book, has homework too. But Helen has so much that with her music lessons and her practising she is busy all the time."

"Bring Helen in to see me after school some day," I suggested. "I should like to see what homework she is doing."

The very next day Helen and her mother came to the house. I talked to the child for a few minutes about her play. Her answers to my questions were bright and quick. She seemed to be a child of more than average intelligence. When I had gained her confidence I said, "Have you any homework tonight, Helen?"

"Oh, yes. I always have homework."

"Show me what it is."

She opened her exercise book and showed me the list of assignments. The first task was to write out fifteen words five times each.

"You have a spelling examination," I suggested, "and these are the words you missed?"

"Oh no!" she replied with an expression of surprise at my ignorance. "Those are the words for spelling tomorrow."

"Yes, yes," I acquiesced, pretending to understand. "You don't know these words and this is how you are going to learn them."

"But I do know them," she protested, quite overcome at my obtuseness. "That's just homework."

I asked her to spell the words, and she did so quite correctly—every one of them. Yet she had to go home and write them out five times each! But that was not all. She had besides some arithmetic to do (two long multiplication questions) and a history "note" to copy from her scribbler into her history note book. Not one of the tasks had any conceivable educational value, and the sum total would occupy, according to the child's mother, at least an hour and a half of her time. And this, it seemed, was going on night after night.

This was in a city. A little later I had occasion to visit a rural school. I watched the children working or idling at their seats for a good part of the afternoon—mostly idling, for it is a very difficult task for a young teacher to keep all the grades profitably busy all the time. But at ten minutes to four, the teacher called all the school to order (the primary had, of course, gone home) and, speaking in a would-be cheerful tone, proclaimed, "Now, for a little homework!"

Each class from the first to the fourth was given some very long and tiresome drill exercises in arithmetic, spelling, geography or grammar. It did not seem to occur to the teacher that this work might far better have been done in school. As it was, the children were permitted to learn habits of indolence during school hours, habits which it would be very difficult for them to overcome later in life, and required to occupy in doing homework time that would be much better spent in doing chores about the home or in play.

What is the truth about homework?

Since last November I have made a point of asking several outstanding educationists what they thought of the value of homework. Their views have only served to support my own most emphatic opinions on the subject. Without exception they all condemned the sort of drill homework usually assigned, and most of them were decidedly against the giving of any homework at all, at least in public schools.

At present I am confining my attention to homework in elementary schools, but the opinion of one secondary school teacher is worth quoting. He is undoubtedly one of the two or three best moderns teachers in Ontario; his examinational record is as good as any; and his best pupils have gained an enviable number of scholarships. But he was most emphatic on the subject of homework. "Homework?" he said. "It's no good. I haven't given any homework in ten years. I believe in having my pupils do their exercises under my own eye, so that I can see that they do them properly. There's no handing of exercises about just before class. No dashing off of exercises without thought or care. When a student really needs assistance I can give it to him—and the right kind of assistance. Homework is an invention of the Devil. It just encourages lazy pupils to be lazier and more careless and slipshod and inaccurate."

The assignment of homework in public schools places a cruel and unnecessary burden on the child. Up to the age of sixteen or seventeen the child's chief business is growing. Education should accompany this growth, assisting it and directing it. The commercializing of a child's powers in such a way as to impede his natural development or undermine his health is unfair and inhuman, and there are laws on our statute books limiting the employment of children in factories and elsewhere

before they have passed through the period of adolescence and have attained their full growth. But what is not generally recognized is that any scholastic cramming which impedes the child's natural development or undermines his health is just as unfair and just as inhuman. The ordinary school day, if the recess periods are deducted, is five hours. Very few children (and indeed not many adults) are capable of working more than five hours a day at the acquisition of knowledge without staleness and over-fatigue; and if we add one or two hours in the evening to this already long day, we run the danger of encroaching on the rights of Nature, our silent partner in this great business of turning children into strong and capable men and women.

When father feels himself a bit under par, with a tendency to lie awake at night, his appetite failing, his temper not of the best, lines of worry appearing on his forehead, he goes to the family doctor and receives a good lecture. He has been going back to the office after hours, or he has been trying to do some work in the evening. He must stop it. When he leaves his office at five o'clock he must leave his business worries behind him, and must be free to take up golf, bowling, bridge, his garden—in fact anything that will take his mind off his work. Father is a full-grown man, with all a man's capacity for hard work; yet this same father will watch his ten-year-old son fretting away at his home-work night after night without ever stopping to think that the boy, who needs much more time for play and rest than an older person, is rarely permitted to forget his business worries for even a single evening.

A neighbor's child was doing his homework the other evening—a child of eight or nine. His mother was hearing him "say his jography lesson," when he suddenly burst out crying.

"Why, Arthur, what is the matter?" she asked rather anxiously.

"I don't know, Mother," he answered. "I guess I'm just tired out."

And Arthur's case is not an isolated one. By the time school has been running for three or four months there are thousands of children all over the country in the same condition—just tired out. While their parents give them iron tonics, we give them homework. While Nature demands rest and play, fresh air and sunshine, we dictate confinement and drudgery. We have a very admirable society whose avowed purpose is the prevention of cruelty to animals. The work of this society is supported by legislation, and a man who would drive a colt as we frequently try to drive our children would speedily find himself in the police court. But the farmer has much better sense than to overwork a colt. He knows that it does not pay.

The child should learn to work by himself certainly, but the place to learn this is in school. Some years ago the Department of Education for Ontario, under Mr. Ferguson, issued a regulation which reads:

"In the time-table for each Form or Grade, period shall be allowed each pupil every day for seat work, including independent study, provided and supervised by the teacher, and the time provided for this purpose shall not be less than one and a half hours a day for each pupil.

All that is required to meet the situation is that teachers should honestly carry out this wise and temperate regulation.

But homework is not only a bugbear to the child—it is a continual source of exasperation to the teacher. She has to plan the homework and

give it; she has to supervise and correct it; she has to see that it is done. Half of the unpleasant scenes during the day arise from the fact that this child or that has not done his homework. When a pupil is working under the teacher's eye discipline is comparatively easy; but when he is expected to work at home in circumstances over which the teacher has no control, circumstances very often in which no one could do good work, the enforcement of obedience becomes almost impossible. What can a teacher do with the child who persistently neglects his homework? She can nag, she can keep him in at recess or after four, she can give him a sound trouncing. But if the home conditions are not right, she will still not achieve her purpose, and she will have been forced to resort to methods of discipline not entirely commendable. Most teachers, I am sure, would feel a great sense of relief if homework were done away with once and for all.

And what of the parents, the third party to the transaction? Night after night, the battle goes on: "Have you got your homework done?" "You mustn't play at that until you've got your homework done." "If you don't do your homework, you shan't go to the movies on Saturday afternoon." Threats and cajolery, pleading and punishment, until both parents and children are worn out with the struggle. When a child does not work willingly in school, his case should be investigated. Is his mental development not equal to the grade in which he finds himself? Is his health poor? Is he suffering from under-nourishment? Are his home conditions bad? But the child who professes a liking for homework should be thoroughly spanked, for he is in a fair way to become an intolerable little prig or hyprocite. The normal child will not do his homework unless he is driven to it; and what father and mother likes to stand over the child with a big stick? If anyone contends that parents like homework, let him go and ask them!

Homework is a burden to the child, the teacher, and the parent. Health authorities and prominent educationists are against it. Then why does it continue? Does it fulfil any useful purpose? The only approach to an argument in its favor that I ever heard is that it trains the child to work by himself. But the argument is absolute twaddle. The child is too fagged by the end of the day, and there are too many distractions in the ordinary home for good work to be possible.

Consider the scene. Alice is doing her homework. She is sitting at the dining-room table trying to memorize the names of the rivers and mountains of Asia. The neighbor's children, less severely disciplined, are still playing just outside the open window. Her big sister, freed by her age from the petty tyrannies of school life, is talking on the near-by telephone to her "boy-friend." They are trying to decide whether to spend the evening at the movies or in the "boy friend's" car on the highway. Alice's mother is reading a bed-time story to the youngest of the family, while her father breaks in with interesting items of news from the evening paper. And through it all and over it all is the persistent and raucous jangle of the radio.

Let us examine what is going on in Alice's mind.

"I must learn these awful names—I must. But I don't see why they couldn't have given their rivers sensible names like Don and Humber and Niagara. . . . The rivers of Asia are the Urals and the Himalayas. . . .

No, those are the mountains. The rivers of Asia are the . . . What's that Dad said? That a thirteen-foot python has escaped from a side-show? My, I wouldn't like to meet that in the dark! Ugh, it makes me feel shivery to think about it. What if it should be under the table? But that's silly—it couldn't be. . . . Yes, Mother, I'm doing my homework. . . . Pythons live in Asia, don't they? Wasn't that where the Di-colored Python Rock Snake lived? Or was it Africa? But I must get on with these silly rivers and mountains. . . . Let me look at the map. The teacher said that there were two important rivers up in that corner. Let me see what they are. Oh, yes. The rivers of Asia are the Tigris and the Mesopotamia. . . . No, Mesopotamia is a mountain or a city or something. And Tigris sounds more like an animal—Mr. Tiger and Miss Tigris. . . . "Should I reveal exactly how I feel, should I confess I love you" . . . Gee, I think Rudy Vallee's singing is swell. . . . Yes, father, of course I'm doing my homework. I was just thinking." . . .

And so on for an hour or two.

What is Alice learning from all this? Is she learning to work by herself? On the contrary she is learning to evade and day-dream and putter. She is learning to do her work in a mechanical and scattered fashion. She is learning to let her thoughts wander over a dozen topics, concentrating on none. And she is learning to hate it all with a deep and abiding hatred.

But this is not the whole story. Very often the child is not even trying to do his work himself. It is looked on as a joke that the father or mother, or the grandfather or grandmother, or all of them together, should do little Willie's homework for him. But it is no joke. Very few parents really understand what the teacher is trying to accomplish, and the result of their efforts is frequently merely confusion worse confounded. And furthermore the whole business is very demoralizing to the child. It trains him in hyprocisy and deception by encouraging him to present as his own work which is not really his own at all.

Homework, I make bold to declare without qualification, performs no useful function. Children would get on much better without it. They would not only be better in health, but they would actually make better progress in their school work. Helen, the little girl whose story I told at the beginning of this article, dropped her homework at her mother's request shortly after her interview with me, with the result that from that day both her health and her standing in the class steadily improved.

But if homework is useless why does it continue?

Homework continues because of our ultra-conservatism in educational matters, a conservatism which makes us loath to adopt anything good or bad in the shape of a change. Homework has always been associated with school work. We had homework, as had our parents and grandparents. Therefore homework must always be given.

Homework continues because of a secret resentment on the part of grown-up people towards the happy and carefree state of mind of childhood. I make this statement with conviction, though I am perfectly well aware that anyone who is not a psychologist will deny it emphatically. Homework continues because of parental vanity. Parents who have achieved nothing of importance themselves seek vicarious glory in the accomplishments of their children. Homework continues because of fear

on the part of those of us who are teachers, a fear that we should not measure up to what is required of us, and should lose our jobs, a fear that in the nature of things is most acute in those who are the most incompetent. And homework continues because many of those who do not believe in it have not the courage to say so.

I was recently asked to talk on this subject before a Home and School Association. I expressed substantially the same views that I have expressed in this article. Next day the local newspaper, not wishing to impair my reputation for good sense, came out with a heading to the effect that Mr. Macdonald thought that sometimes some teachers were inclined to give too much homework! Let me say here once and for all that this is not what I think. What I think is that homework, any homework, is not only unnecessary, but is a positive detriment to the child's physical and mental advancement. I think that homework is a crime against childhood, and the last word in pedagogical imbecility. I think that the assignment of homework is a confession of incompetence on the part of a teacher. We are paid for instructing the children under our care, and when we give them work to do at home we are merely trying to shift to the shoulders of the parents part of the burden that should be ours. And I think that any admonition merely to limit the amount of homework is only an evasion of the issue; for after all the trouble is not so much the amount of homework the child does, as the fact that he does any. When he leaves school at four o'clock he should be as free as any little animal in the woods.

British History Teaching; Topical Organization and the New Text Book

By ARTHUR ANSTEY, *Provincial Normal School, Vancouver*

THE recent introduction, in Grades VII. and up, of Wallace's 'New History of Great Britain and Canada' marks an epoch in history teaching in this province, for it constitutes a definite attempt to modernize the teaching of this subject. It is probable that the majority of history teachers who have given serious attention to the principles underlying their practice would not favor a general "scrapping" of history teaching and a substitution therefor of a study of "current social problems." There is little likelihood of any such drastic change being made, although the study of such material should certainly supplement the history study. Many teachers, however, have long been dissatisfied with the chronological sequence of innumerable details, and of the attempt to cram into the course the maximum of information considered desirable for the child of pre-adolescent and adolescent years, without any real organization of the material such as characterizes the so-called "topical" method.

Wallace's text definitely attempts this reorganization of subject matter, and is therefore in line with the conclusions of Morrison* and other students. It is not difficult to treat these topics as real "units of learning," for properly handled they readily lend themselves to such treatment. The merits of the new text are: (1) the topical arrangement of subject matter; this necessarily involves (2) the omission of much detail traditionally included but not relevant to the "unit of learning" conception. These merits greatly outweigh such defects as (1) the vocabulary used, which is frequently difficult for Grade VII. pupils; and (2) over-indulgence in abstract statements and figures of speech where simple, concrete language would be more suitable. In using the text the teacher needs to keep these defects in mind, and to help the child build up a vocabulary of historical terms, so that technical difficulties may not hinder the grasp of the essential matters studied.

The book undoubtedly marks an advance on texts hitherto used, and consequently implies changes in the organization of subject matter. To many teachers its most irritating problem will be found in Part I. of the British section. Parts II., III. and IV. are self-explanatory: they evidently present clear-cut topics, or "units of learning," though together they only cover some 118 pages of the book. Part I., on the other hand, covers 130 pages and treats of British history from the beginning down to today. Wallace calls it a "bare outline of the general history." Has the topical arrangement been abandoned in this, the first and most important section of the story? By no means: for this "bare outline" is as distinctly topical as are Parts II., III. and IV. A careful study of Part I. will show that it really emphasizes "social conditions and national development;" it might well have been entitled "The British Nation—Social Life and National Development." Further, Wallace divides Part I. into **six topics,** each of which clearly presents an outstanding change

*Morrison. Practice of Teaching in the Secondary School. Chicago University Press.

or movement; it is unfortunate that he omits any concise summary of the dominant idea that lies behind each of these six topics. Let us examine them in greater detail:

The first (ch. 1) is entitled "The British Nation in the Making." Here the important concept is that of a **composite race.** The coming of Roman and Saxon, Dane and Norman is not treated as a succession of military conquests, with details of fighting, lists of battles, and names of commanders. The idea is rather that of successive waves of immigration, each possessing its own characteristics, and each contributing something—either to the social life and civilization, or to the racial characteristics of the resulting composite—the British people. Next we have "Feudal England" (ch. 2), carrying on the story from Hastings to 1485. Here the dominant idea is threefold: (1) what the feudal system was, including both the military side, with the "feudal incidents" and the social organization of the manor; (2) social conditions under feudalism, life in village, town, and monastery; (3) influence of ruling kings, strong rulers holding barons in control, with resulting social well-being, weak rule involving social suffering. In this chapter striking omissions occur: little mention is made of Edward I.'s relations with Wales and Scotland, the Hundred Years War and War of Roses are merely referred to, the time-honored "list of Kings" ends with Edward 1—all other kings down to Henry VII. are practically omitted. Why? Because these matters, interesting and important as they may be, are not relevant to the dominant ideas in the study of this topic, which are(as we have seen) the *social life of the people under the condition we designate as feudalism.*

Third, we have "Tudor England," 1485 to 1603, (ch. 3). Here gain are three dominant concepts: (1) that of the strength of the Tudor kings—shown to be due to voluntary submission of the people; (2) the growth of nationalism as shown in (a) the winning of a National Church independent of continental control, and in (b) the national struggle against Spain; (3) the social life of the people—to which nine out of twenty-three pages are devoted.

Fourthly, "The Stuart kings—rebellion and revolution" (ch. 4 and 5). Here the outstanding ideas are (1) parliamentary control established; (2) the Protestant succession secured; (3) social life during these changes, to which nine out of twenty-eight pages are given.

The fifth topic is "England under the Hanoverians" (ch. 6 and 7). This may be considered as emphasizing two very important changes or tendencies: (1) the rule of the great prime ministers ("uncrowned kings," Wallace calls them) and their work for the people; (2) social life—the industrial revolution and humanitarian reforms—"democracy established"; this latter section includes 15 out of a total of 38 pages.

Lastly, we have "The Twentieth Century" (ch. 8), with its "Edward the Peacemaker" and "Great War"—and after.

It will be seen that some of these six topics, which make up Wallace's "bare outline" of 130 pages, are just as full as and cover more pages than the last two of his major topics: the "Growth of Political Development" and "Language and Literature." This sub-division of Part I. into definite self-contained and significant "units of study" should help us to maintain, throughout any course based on this text-book, the topical organization of subject matter which it professes to follow.

The A-B-C of the St. Lawrence Waterway Project

By GEORGE WASHINGTON STEVENS

WHAT is the historical background of the St. Lawrence Waterway, regarded as one of the World's great trade routes?

If we could be taken up into the air high enough to get a glimpse of all the continents of the Earth at one time, we would observe that each had been endowed with one or more great rivers transcendently great, and North America with two of the greatest, the St. Lawrence and the Mississippi. We should find that all of these great rivers flow from the far off interiors of continents into the vast oceans, and together link up the different countries of the world into one vast system of transportation for trade, commerce and communication.

Over a hundred years ago, Great Britain recognized the principle that the high seas should remain free and open, during the continuance of peace, for the enjoyment and use of every nation.

Over a hundred years ago, Great Britain, urged by the desire to develop her trade with the other countries of the world, sought to persuade expanding nations to open and make free all the great rivers of the world for navigation. The idea was, that for the advancement of all nations, freedom of navigation not only on the oceans, but on all the arterial waterways of continents was necessary and should be brought about.

The first rivers actually to become so internationalized for the commerce of all nations were the Rio de la Plata, the Danube and the Amazon. In 1873, navigation on the Mississippi River was made equally free to British subjects and citizens of the United States forever.

Then followed, by proclamation, after the Congress of Vienna in 1815, the opening up of all the inland waterways of Europe on equal terms to all nations.

While it is true that equality of navigational rights, in that part of the St. Lawrence and Great Lakes through which the International Boundary passes, was agreed upon in the original Treaty of 1783 and in subsequent Treaties of 1794, 1842 and 1909, freedom of navigation, in the wholly Canadian part of the St. Lawrence, was first agreed to between Great Britain and United States under the Treaty of Reciprocity of 1854, and was confirmed by the Treaty of Washington in 1871.

As a consequence of all these Treaties from 1783 to 1909 between Great Britain and the United States the St. Lawrence Waterway, including the Welland and St. Lawrence Canals, is now equally free to the ships of both nations, from the head of the Lakes to the Sea.

Even if we would, we cannot turn back the hands of the clock of history. These Treaties are part of that history and we have to face the realties thereby established and base our understanding of the question on a knowledge of the facts as they present themselves today—and so we repeat the statement that the St. Lawrence Waterway including the Welland and St. Lawrence Canals is by Treaty

equally free to both Canada and the United States for navigation purposes from the head of the Lakes to the Sea.

Now, what do we understand by the St. Lawrence Waterway?

The St. Lawrence Waterway, beginning at the Atlantic Ocean and ending at the head of the Great Lakes, is 2200 miles long and may be divided into three divisions.

The Ocean Division of 1000 miles from the Atlantic to Montreal, the Inland Division of 200 miles from Montreal to Kingston, and the Great Lakes Division of 1000 miles from Kingston to Fort William and Chicago.

Out of its total length of 2200 miles, for 1074 miles the St. Lawrence Waterway flows through exclusively Canadian territory, and for 1144 miles, it forms the International Boundary between the United States and Canada.

Consequently, for navigation purposes, the St. Lawrence river falls within the category of those waterways that have become great highways of international trade and commerce throughout the world.

This being so, we may ask ourselves what are the prospective rights of Canada and United States in the St. Lawrence Waterway, first as to Navigation, second as to Power?

A study of the Treaties affecting the St. Lawrence reveals the facts that both countries have sovereign rights on their own side of the International Boundary from the head of the Lakes to the Atlantic Ocean; and that by agreement, Navigational rights are equal for each within the Territorial waters of the other.

The United States shares her rights of navigation with Canada in Lake Michigan, which is wholly American, and Canada shares hers with the United States in that part of the St. Lawrence which is wholly Canadian. This applies to the Welland and the St. Lawrence Canals, and to the other passages and channels between the Great Lakes.

These stipulations as regards equality of navigation are, by Treaty, to apply to any new canals contiguous to the Waterway that may be constructed by either country. It would appear, therefore, that no money can be expended, or work executed, by one party within the territory of the other, except by mutual agreement, and that no new rights are created or old ones destroyed for either country by money expenditures in the development of the river. Each has all the navigational rights and all the power rights it can ever possess now.

The ownership of Power is supposed to be vested in the Provinces or States where it exists, but at all events Power within the United States belongs to that country and Power within Canada belongs to Canada.

What are the proposals for the further development of the St. Lawrence Waterway?

The St. Lawrence Waterway, as it stands today, is like a railway with three different gauges. It has a thousand miles of 30 foot, 200 miles of 14 foot, and 1000 miles of 22 foot navigation, and that is its outstanding handicap.

The St. Lawrence Waterway Project, as at present conceived, proposes to deepen the present 14 foot and 22 foot sections of the river and lakes to a uniform depth of 27 feet, which would permit two-thirds of the world's tonnage to reach the Great Lakes. The New Welland Canal, between Lake Erie and Lake Ontario, just now completed, is the first section of the new Waterway to be constructed. The New Beauharnois Canal, between Lake St. Louis and Lake St. Francis, 16 miles long, now under construction, will be the second. The Welland, constructed at Canada's expense, and the Beauharnois, constructed without expense to Canada by the Beauharnois Power Company, a private corporation but Canadian. What remains to be done are the stretches from Montreal to Beauhornois and from Lake St. Francis to Lake Ontario, which are both included in the 14 foot section west of Montreal, and also the channels between the Great Lakes to be deepened from 22 to 30 feet. In order to complete the Waterway after the Beauharnois Power Canal is constructed, it will be necessary to build 18 miles of purely navigation canal, 11 miles in the Lachine section, 7 in the International section. In other words, all that Canada has to do to complete the St. Lawrence deep waterway, within her own territory, is to build between Montreal and Beauharnois 11 miles of 30 foot canal navigation and deepen the ship channel in Lakes St. Louis and St. Francis, leaving her power development not now included in the Beauharnois Scheme to be developed later as and when required.

Whence comes the urge to deepen the St. Lawrence above Montreal in order to make it available for ships drawing 25 feet of water?

The urge to deepen the St. Lawrence above Montreal so as to give to the continent of North America a 27 foot waterway to the sea, comes primarily from the United States, whose industrial progress in the Middle West has reached a point where the pressure of increasing business seeks additional and cheaper transportation facilities.

The inland "Sea Coast" of the United States bordering on the Great Lakes and St. Lawrence is 8000 miles long, longer in fact than either the Atlantic or Pacific coast line of that country. The individual States which form this coast line have an area of 400,000 square miles and a population of 44,000,000. Behind these are six more States with a population of 10 million and an area of one million square miles.

The fourteen States affected by the St. Lawrence Waterway produce more than half the agricultural and manufactured wealth of the United States.

Add to this the population of Ontario and the Prairie Provinces of Canada, and we find that a deepened St. Lawrence will tap the richest and largest producing area in the world, both in manufacture and agriculture. The Canadian and American territory tributary to the Great Lakes grows over 30 per cent. of the world's total grain production, 5 billion bushels in the United States and one billion in Canada. In 1926, 540 million bushels were carried by rail to the elevators, at the head of the Lakes; 84 per cent. came eastward by water, but only 20 per cent. reached Montreal, largely on account

of the bottle neck of 14 foot draft in the St. Lawrence Canals, which limited the capacity of the boats.

As the wheat growing areas of all our competitors in the world are about six hundred miles nearer deep water than ours are, we must look forward to cheapening the growing of wheat by mass production, and to cheapening its transportation by water.

It is the considered opinion of those who speak with knowledge and authority that the St. Lawrence Deep Waterway will undoubtedly cheapen transportation and relieve congestion.

Now what about Power?

There are estimated to be in the St. Lawrence River, five million undeveloped horsepower. All of this is contained in the first 115 miles west of Montreal. Four million horsepower out of the five are within Canadian territory. Does not this challenge our imagination and hopes?

In the 48 miles of river, between Cornwall and Prescott, through which the International Boundary passes there are estimated to be 2,360,000 undeveloped horsepower, half of which belong to each country.

It is concerning this so-called "International Section" of the river, with its millions of horsepower available for development that so much controversy has arisen. In this section the development will have to be a joint one, both for navigation and power.

A great many people are against Canada entering into any joint action with the United States, fearing that the United States will use her power and wealth to get advantages she may not be entitled to . These fears, I am convinced, are groundless.

The United States Government in its note of March, 1928, to the Canadian Government has made the following declaration:

> "That the United States fully recognizes the right of the Dominion of Canada to the ownership and use of the Canadian share of the power which may be developed in the International Section of the Waterway, as well as all that may be developed in the National Section, and it recognizes also that the disposition of the power is purely a domestic question.
>
> "It recognizes further, that this share is an inherent attribute of Canadian Sovereignty irrespective of the agency by which the power may be developed."

Now, what other objections have been raised against the proposed scheme?

No great undertaking has ever been launched without giving rise to many objections. There have been many against the St. Lawrence Project.

In my book on the St. Lawrence Waterways, most of them will be found, tabulated and analyzed.

In my opinion, the advantages vastly outweigh the objections, many of which cannot stand close examination.

For example, it has been urged that, at best, the St. Lawrence and Great Lakes are only available for seven months in the year. While this statement is true, it is also true that Montreal has become the second largest seaport in North America on a seven months year,

and Great Lake tonnage in a seven months year is more than double the combined tonnage of the Panama and Suez Canals for a twelve month year! Think of that!

What is more, the business is steadily increasing. In 1926 the total movement of traffic on the Great Lakes was 121,000,000 tons, 8 million ton more than 1925.

In 1927, 14,790 vessels carrying grain used the Canadian Canals, against 7000 vessels in 1920.

In the face of these facts the seasonal objection does not carry much weight.

Again it has been objected that ocean ships would never go into the Great Lakes (for 2200 miles) because of restricted navigation, yet ships regularly go up the Amazon for 2300 miles under conditions certainly not more propitious than those offered by the St. Lawrence.

The same argument was also used against deepening the St. Lawrence itself below Quebec. Yet 40,000 ton ships with a speed of 24 knots are now being planned for this service.

The restricted navigation argument was also used against the deepening of the St. Lawrence between Quebec and Montreal, yet here again 20,000 ton ships with a speed of 18 knots are now in regular service.

With the St. Lawrence Deep Waterway in operation, there would be above Montreal about 60 miles of restricted canal navigation, and 1085 miles of navigation through the deepest and largest body of fresh water in the world.

The New Welland Canal, part of the St. Lawrence Waterway, is 25 miles long, 30 feet deep and 200 feet wide. The Suez is 100 miles long, 36 feet deep and 137 feet wide. Five thousand vessels carrying 29,000,000 tons of cargo pass through the Suez Canal in a year.

If the rtstricted navigation of the Suez Canal allows ocean ships carrying 29,000,000 tons of freight to pass through its length of 100 miles in a year, it seems reasonable to expect that the 60 miles of restricted canal navigation in the proposed St. Lawrence Deep Waterway could do the same.

The chief objection to the St. Lawrence Waterway Project is its supposed colossal cost. Now let us examine this together.

The St. Lawrence Water Project, when completed, will bestow upon the continent of America, a deep waterway 2200 miles long with a minimum depth of 27 feet, and make available 5,000,000 horsepower of electricity.

Various estimations of the cost have been made. Lesslie R. Thomson, Consulting Engineer, in his address before the Engineering Institute of Canada in February, 1929, states:

> "The whole St. Lawrence deep waterway, including all navigational facilities (27 feet water), and all power (5,100,000 installed horsepower) is estimated to cost $839,000,000, if both power and navigation are constructed simultaneously, and $901,000,000, if navigation and power are provided separately."

This includes the Welland Ship Canal now in operation, and constructed by Canada at a cost of $130,000,000, and the deepening of

communication channels between the Great Lakes which has yet to be undertaken.

If we assume the combined estimated cost of navigation and power at $850,000,000, and deduct the $130,000,000 already spent by Canada for the Welland Canal, we reach the figure of $720,000,000 as the estimated cost of the completed waterway for 27 foot navigation and 5,000,000 new installed power.

If from the $720,000,000 estimated cost of power and navigation we deduct the $545,000,000 estimated cost of power, we have remaining the estimated cost of navigation, which is $175,000,000. This is the crux of the whole financial problem, because whereas the provision of navigation is directly a taxpayer's responsibility, the provision of power is not a matter directly the concern of taxpayers, power being a commodity that pays for itself.

Let us eliminate the question of power cost entirely for the moment and further analyze the cost of the St. Lawrence Deep Waterway to Canada.

The St. Lawrence Waterway, as it stands today from the ocean to the head of Lake Superior, represents a total capital expenditure of about $300,000,000 for navigation.

Of this sum Canada has already contributed $250,000,000 and the United States $50,000,000. Canada has deepened the St. Lawrence to 30 feet from Montreal to the ocean channel below Quebec, built the St. Lawrence Canals and the New Welland, and a lock at Sault Ste. Marie, equipped the whole with the most modern aids to navigation, and paid the whole cost of maintenance and operation.

The United States has deepened the water communication between the Great Lakes west of Lake Erie and built the large locks at the Sault, supplied aids to navigation and the cost of maintenance and operation.

The present position is therefore that Canada has put five times as much capital into the improvement of the St. Lawrence for navigation as has been put by the United States for the same purpose, and the United States has enjoyed free use of all this for 60 years.

It will be recalled that we originally gave the United States free use of our canals and waterway, as part compensation for her allowing the natural products of Canada access to her markets on special terms, under the Treaty of 1854. This Treaty was cancelled in 1866, and was replaced by the Treaty of Washington 1871, which gave the United States free use of the St. Lawrence without, in my opinion, Canada receiving an adequate quid pro quo.

In view therefore of Canada's expenditure on the St. Lawrence to date of $250,000,000 and the United States expenditure of $50,000,000, and that for sixty years the United States has enjoyed the use of the St. Lawrence Canals and river for nothing, the United States, in my opinion, should at least assume the obligation of developing the International Section for navigation and power in accordance with plans concurred in by both national government as to navigation and in accordance with the Governments of Ontario and the State of New York as to power, under authority of the International Joint Commission.

Let us examine the distribution of navigational cost to Canada on this basis.

The United States would undertake the construction at her own expense of everything for navigation and power from the International Boundary westward, and she would acknowledge that half the power so developed would belong to Canada.

That would leave to be constructed by Canada 11 miles of purely navigation canal from Montreal to Beauharnois, the deepening of channels in Lake St. Louis and Lake St. Francis in order to complete the St. Lawrence Deep Waterway to Lake Ontario.

Translated into figures this would mean an expenditure for navigation and power by the United States of $385,000,000, and an expenditure by Canada of $232,000,000, $130,000,000 of which Canada has already spent on the New Welland Canal, leaving a net balance to be spent by Canada to complete her part for navigation from Montreal to the International Boundary of $92,000,000.

As a matter of fact the St. Lawrence Deep Waterway has already been started on that principle.

We have built the New Welland Canal at a cost of $130,000,000. The Beauharnois Canal, 16 miles long, connecting Lake St. Louis and Lake St. Francis, is being built by the Beauharnois Power Company, free of cost to Canada, in exchange for the privilege of developing 500,000 horsepower.

This, in my opinion, would put us face to face with a clear cut proposition, devoid of International entanglements, give us a deep waterway at a cost within our means, and permit Canadian power to be developed by Canadians as and when it may be required.

The United States, in its note of March, 1928, accepted the Canadian proposal to "Include in the negotiations any outstanding problem affecting the Great Lakes and St. Lawrence."

What are some of these outstanding problems?

(1) The United States has perpetual navigation rights in the St. Lawrence on equal terms with Canada.

Our right to navigate the Mississippi forever on equal terms with the citizens of the United States was granted us under the Treaties of 1783 and 1794. These treaties were automatically ended by the war of 1812. These rights should now be reinstated.

(2) The Illinois and Michigan Waterway, a series of new canals leading from Lake Michigan to the Mississippi River, the water for the first section of which is taken from Lake Michigan by the Chicago Diversion, should be declared free and open for navigation to the citizens of both countries.

(3) As the Chicago Drainage Canal has taken enough water from Lake Michigan, for sewage disposal, canal navigation and water-power, to lower all of the Great Lakes and the River St. Lawrence as far as Lake St. Louis above Montreal, by from 3 to 5 inches, it is absolutely necessary that remedial works be agreed upon in order to hold intact within the Basin of the Great Lakes the waters upon which the whole St. Lawrence system depends for power and navigation.

(4) American boats from the Hudson River come up through

the American and Canadian Canals into the St. Lawrence. I find no reciprocal privileges accorded Canadian ships to navigate the Hudson River. This should be adjusted.

(5) Certain portions of the Columbia River are free and open to the Hudson Bay Company and to British subjects trading with the company. Should not the Columbia River be declared free and open to Canadians on the same terms as the St. Lawrence is to Americans?

These five existing condi[illegible] seem to be of a somewhat discriminatory character and cer[illegible]t in Canada's favor. In a somewhat different category a[illegible] three more points, which, when settled, will tend to promo[illegible]er understanding between the two countries.

(6) Harbor dues in Great Lakes ports should not be discriminatory. On the Danube River in Europe, which flows through many different countries, the following regulation is in force: "Ports and their machinery and equipment shall be accessible to navigation and utilizable without distinction in respect of flag, country of origin or of destination, and without preferential treatment."

Again—

(7) In the International Section of the River the engineers have traced the route of the channel and placed the locks so as to produce the most economic results, both for navigation and power. By this arrangement all the locks and all the power houses are within American territory. I would suggest that the International Boundary in this section be readjusted, so that each nation's water power be within its own territory.

(8) It would be better to have two separate and distinct agreements with the United States concerning the St. Lawrence, one covering navigation and one covering power in the International Section, for the reason that navigation is under control of the Federal Government of each country without any question, whereas the control of power may belong to the Province or State where it is situated. Where State rights are directly concerned, the Treaty making powers of the United States are not clear, and might be assailed by any State that believed its rights interfered with. We don't want to get into a legal tangle on this account..

And again—

(9) It should be agreed beforehand that the St. Lawrence Waterway be free and open to the vessels of all nations not at war with either the United States, Great Britain or Canada, and that in case of war between the contracting parties, vessels and ships be exempt from blockade, detention or capture by either. This provision should include the Great Lakes, communication channels and St. Lawrence River to the sea, and extend beyond the mouth of the St. Lawrence for a distance that shall not be less than the distance from the earth to the sun in a straight line.

What are some of the advantages of the St. Lawrence Waterway?

(1) It will double the length of the St. Lawrence for deep water traffic, and open a waterway to two-thirds of the world's ocean tonnage, tapping agricultural and industrial areas with 60,000,000 people.

(2) It will create 5,000,000 new installed horsepower, 4,000,000 of which are in Canada.

(3) It will permit 500,000 bushels of grain to be carried in one trip against 100,000 bushels at the present time.

(4) By so doing it will lengthen the season of navigation and relieve congestion at ports.

(5) The minimum estimated tonnage available for a deepened St. Lawrence Waterway is 20,000,000 tons per annum, and the minimum estimated saving in freight on grain is 4 cents a bushel.

(6) The development of 4,000,000 installed horsepower on the St. Lawrence would mean, according to Lesslie R. Thomson, Consulting Engineer—

12,000 new factories.
300,000 additional employees.
1,200,000 increase in population.
$2,000,000,000 additional capital invested in Canada.
$800,000,000 additional wage roll.

(7) The benefits of the Waterway are of two kinds, direct and indirect. Direct benefits consist in the savings on freight rates and the influence of lower water rates on existing through rail rates. Indirect benefits are seen in the raising of the selling price of grain in the western interior, due to the fact that export grain moves to its final market at a lower rate.

(8) It is estimated the total annual cost of the Waterway—interest during construction, maintenance, operation, and sinking fund payments—will be balanced by the savings on the freight carried each year.

The indirect benefits, which are of profound economic significance are all velvet.

(9) Canada's independence of the United States is founded on east-to-west transportation. The St. Lawrence Deep Waterway, as an agent in reducing the cost of this transportation, strengthens Canada's national position.

This picture emphasizes the true significance of St. Lawrence Development, which would give Canada power and deep water navigation on a scale nowhere existing in the world, and make possible an industrial development that would fit Canada to become one of the most powerful manufacturing centres of the world for home and foreign markets.

CONCLUSIONS

What conclusions may we draw from the foregoing review?

First of all that the St. Lawrence Waterway is one of the most important public undertakings that has ever been presented for the consideration of the Canadian people.

Its vast influence for or against the future of our country's development makes it a duty for each one of us to try and understand it. It is bound to come before the people of this country in the immediate future, and deserves the earnest thought of all of us, if it is to be worked out on a fair basis.

From an engineering point of view after ten years of investigation, and on the evidence of every technical service to which the

proposals have been submitted, the scheme has been declared to be practical, to be of economic advantage and of public utility.

It has been declared necessary to meet the industrial expansion of both countries.

If the United States undertakes to construct, at her own expense, power and navigation facilities in the International Rapids Section and deepens the intercommunicating channels between the Great Lakes, and Canada undertakes to construct the 11 miles of necessary canals from Montreal to Beauharnois, deepens the ship channel in Lake St. Louis and Lake St. Francis, the St. Lawrence Waterway can be opened for navigation from the Ocean to Lake Superior for a capital cost to Canada of something like 100 millions of dollars, according to the estimates now available, and Canada will have had developed, without expense to her, 1,600,000 horsepower of electricity which can be used to increase her industrial wealth and prosperity.

This would leave 3,500,000 horsepower, all in Canada, still to be developed as and when it might be required.

On this basis I regard the development of the St. Lawrence Deep Waterway as a sound and advantageous proposal, that will be economically within our means, and one that will open up a field of industrial development and transportation that will bring to all Canada increased prosperity and prestige, on a scale vaster than our dreams and richer than our most sanguine hopes.

For a complete analysis of the St. Lawrence problem, see "The St. Lawrence Waterway Project," by George W. Stephens, to be had at all booksellers throughout Canada, or through McClelland & Stewart, Limited, 215 Victoria Street, Toronto, Canada.

Miss Lucretia F. Davidson

Miss Ada E. McCallum

Miss A. Helen Rankin

In addition to the loss of Mr. J. G. Lister and Mr. F. H. Dobson, our ranks have been depleted by the deaths of Miss Ada E. McCallum of Florence Nightingale School, Vancouver, Miss A. Helen Rankin of Florence Nightingale School, Vancouver, and Miss Lucretia F. Davidson of Grandview School, Vancouver, during the past few weeks. All of these ladies had won for themselves the high regard and esteem of their pupils and their colleagues of the teaching profession, as was evidenced by the many tokens and expressions of sympathy extended to their relatives. The January Magazine will contain further tribute to them from their fellow teachers.

THE CLIMAX

"How long you in jail fo', Mose?"

"Two weeks."

"What am de cha'ge?"

"No cha'ge, everything am free."

"Ah mean, what has you did?"

"Done shot my wife."

"You killed yo' wife and only in jail fo' two weeks?"

"Dat's all—then I gits hung."

CORRESPONDENCE

(The following correspondence is self-explanatory and, at the suggestion of the Minister of Education, we publish it for the information of all teachers. Doubtless it will be necessary for the School Boards, School Health authorities, and the teachers to have conferences as to the best method of carrying out the suggestions in their respective districts, for conditions are by no means uniform throughout the Province. The question of prize essays is one that should be given serious consideration to ensure that, if such a scheme should be adopted, the essays should be written under such conditions as will guarantee that they are the unaided efforts of the pupils themselves.—EDITOR).

DEPARTMENT OF EDUCATION

OFFICE OF THE SUPERINTENDENT

VICTORIA

November 2nd, 1930.

Harry Charlesworth, Esq.,
General Secretary,
B. C. Teachers' Federation,
Credit Foncier Building,
Vancouver, B. C.

Dear Mr. Charlesworth:

I beg to enclose a copy of the letter which the Honourable the Minister of Education has received from Dr. Harry S. Thomson, Field Secretary of the Canadian Dental Hygiene Council. The Minister is favourable to the Programme outlined by Dr. Thomson and has suggested that you might possibly give it some publicity in "The B. C. Teacher."

Yours very truly,
(Signed) S. J. WILLIS,
Superintendent of Education.

(COPY)

THE CANADIAN DENTAL HYGIENE COUNCIL
Suite 312, 170 St. George St.,
Toronto, Ont., Nov. 1st, 1930.

Hon. Mr. Hinchliffe,
Minister of Education,
Province of British Columbia,
Vancouver, B. C.

Dear Mr. Hinchliffe:

At your request I am embodying in this letter some of the details

of the Programme we have planned for the British Columbia Mouth Health Educational Campaign.

In the first place, the Programme is being put on by the Canadian Dental Hygiene Council, which is a voluntary organization of public spirited laymen and dentists, working under a grant from the Federal Government, Canadian Life Insurance Officers' Association, and various other organizations, to promote General Health from a Dental Health standpoint.

The object of these Campaigns is to carry on Dental Health Work in each province where the Provincial Governments themselves are not carrying on a definite programme, and to assist where they are doing so.

Our aim in the British Columbia Mouth Health Educational Campaign is to carry the story of Preventive Dentistry and what it means, to every man, woman and child in the Province. The effort will be entirely Preventive Dentistry. Preventive Dentistry means corrected habits of living, a regulated, balanced diet, and a proper attention to mouth cleanliness and Oral Hygiene. We are not so greatly concerned with the amount of existing dental decay, from an operative standpoint, but we are concerned with preventing diseased conditions, and in order to accomplish this we must endeavour to lessen the decay existing during the next ten or twenty years. This can only be done through education—it is not a matter of operation or treatment—it is solely one of education and knowledge.

Perhaps the most important group that we have to meet through this Educational Health Programme is the school children. In order that we may reach them under the very best auspices, it is necessary that we have the hearty co-operation of the school inspectors, principals and teachers throughout the Province. We already have their support individually, for no one realizes more the great need for Health Education than does the school teacher. But in order that we may have this co-operation under official auspices, we are asking your Department to send a letter to every Inspector, Principal and teacher throughout the entire Province, requesting them to place at the disposal of the Committee their co-operation so that there might be presented an address of some fifteen or twenty minutes' duration to every school child. This can be done successfully only during school hours, so that the reaction on the child is that it is a matter of education of equal importance to any other subject which he is studying.

The Committee would like very much also to meet the school teachers collectively. In other provinces this works out more satisfactory where this meeting is carried on, say, during the last half-hour of the school session, rather than during the teacher's free time after the school is dismissed.

It is also planned by the Committee to distribute to every child a book, illustrated in colours, which teaches Mouth Health entirely through stories and special articles.

In order to further extend our efforts for Mouth Health Education, each dentist in the Province has consented to give two days of his time to carry on an inspection of the mouths of the school children. In this way, each child will be presented with a chart detailing the condition of his teeth and his mouth health, which he will take into his home. This acquaints the parents with the conditions existing; we have found this a most effective way of teaching mouth health—through personal application.

As about 75,000 Mouth Inspection Chart blanks are required for this purpose the Committee earnestly hopes that your Department will co-operate to the extent of providing these.

In connection with the campaign, the Committee is conducting a prize essay contest for school children. The Province is divided into 20 districts. A prize of $10.00 will be awarded in each district for the best essay on Mouth Health, the material for the essay to be based on matter contained in books distributed during the campaign. A special prize of $25.00 will be given for the best one chosen from the prize winning papers in the Province.

To sum up our entire programme, it is planned:

To have fifteen-minute addresses given by interesting, trained speakers to every school child in the Province.

To present each child with a book on Mouth Health, attractively printed and illustrated in colors.

To give each child to take to his home a chart showing the condition of his teeth and mouth health.

To give him the opportunity to take part in a prize essay contest on mouth health.

To provide moving picture films for the use of moving picture houses and theatres in each locality during the campaign dates.

To publish, through the co-operation of the newspapers, special articles dealing with general health from a dental health standpoint.

We earnestly hope that you and your Department will lend us your co-operation in this effort. The only financial outlay from your Department would be in providing the mouth inspection chart forms. Apart from this it is a matter of co-operation by the various officers of your Department.

Such a campaign as we have planned, carried on by a Federal organization, through the Educational Committee of the British Columbia Dental Association, under the auspices of the Departments of Health and Education of the Provincial Government, cannot fail to do a very splendid work in promoting the general health and education of the people of the Province—particularly to the ones needing it most.

Yours very sincerely,

HARRY S. THOMSON, D.M.D.,
Field Secretary.,
Canadian Dental Hygiene Council.

Educational Reorganization in N. Z.

THE Educational Committee of the New Zealand House of Representatives has issued a long report on Educational Re-organization. The recommendations include:

The termination of the Primary School course at 11 plus or after passing Standard IV.

Age of compulsory attendance raised from 14 to 15 with provision for exemption in cases of hardship.

Abolition of the scholarship system with the substitution of maintenance bursaries to assist deserving pupils to continue education to the higher stages.

Practical instruction in Agriculture and allied subjects to be given in all schools.

Only one Teachers' Register for the whole service.

A new salary scale covering the whole service with a view to the elimination of anomalies at present existing between the primary, secondary and technical services, and between men and women teachers—the scale to be based on the principle of the payment of the teacher instead of the payment of the position together with recognition of family responsibilties.

Leaving Certificates at 15 and at later ages, to be based on individual progress cards.

Revision of University allowances and bursaries, including training college studentships.

Home-work in grammar and arithmetic in primary schools forbidden, and home-work in all schools reduced to a minimum.

No State teacher required to disclose his religious beliefs or denomination.

League of Nations teaching in training colleges and schools.

National school building programme to be proceeded with at normal rate, notwithstanding financial stringency.

Systematic reduction of size of classes down to a maximum of thirty-five within five years.

Re-organization of the universities. Training colleges to be handed over to the control of the universities.

Teachers' College, Columbia University Educational Tours to Europe

Summer of 1931

THE International Institute of Teachers College, Columbia University, co-operating with the *Zentralinstitut fur Erziehung und Unterricht* in Germany, the Pedagogical Department of the Second University of Moscow in Russia, and the Ministry of Public Instruction in France, is planning a series of study tours for schoolmen and educators in the summer of 1931. The tours will be to Russia beginning in Moscow on June 15th and continuing for six weeks; to Germany beginning in Bremen on June 22nd and continuing for six weeks; and to France beginning about June 1st and continuing for six weeks.

These tours are organized under the auspices of the respective educational authorities in Germany, Russia, France and England. The leadership of the tours is divided between Teachers College, Columbia University and the educational authority in the various countries.

The purpose of these trips is to provide teachers with direct insight into the life and organization of foreign school systems. The tours are so organized, however, that liberal opportunity is afforded members of the groups for intimate contact with many other phases of life and culture in foreign countries, such as music, art, drama ,industry, agriculture, commerce and politics. Very definite provision is made for these phases of culture of the countries visited.

Under the guidance of foreign educational leaders, these tours offer most unusual opportunities to see schools in operation. This expert guidance ought to make the tours attractive since it is not often that such oportunities are made available to foreign visitors.

University Credit

University credit may be granted to participants in these tours, provided the requirements for credit are met. Details regarding these requirements are given in the Columbia University *Summer Session Bulletin of Information.*

Full particulars may be obtained from Dr. Thomas Alexander, International Institute Teachers College, Columbia University, New York.

Statement of Membership to December 11th, 1930

1930-1931

Association	Enrolled	Paid-up	Total Members To Date
Associate Members	...	1	1
Alberni	9	4	13
B. C. M. E. H. A.	...	1	1
Burnaby T. A.	50	5	55
Chilliwack T. A.	...	6	6
Comox D. T. A.	6	4	10
Courtenay T. A.	5	...	5
Cranbrook T. A.	2	2	4
Cumberland T. A.	8	...	8
Fernie D. T. A.	10	3	13
H. S. T. A. L. M.	138	80	218
J. H. S. T. A.	61	39	100
Kimberley T. A.	8	...	8
Ladysmith T. A.	5	2	7
Langley T. A.	1	1	2
Matsqui T. A.	1	...	1
Mission T. A.	10	1	11
Nanaimo D. T. A.	41	9	50
Nelson D. T. A.	3	8	11
New Westminster T. A.	42	62	104
Nicola Valley T. A.	...	1	1
Normal Graduates	137	47	184
N. V. C. T. A.	18	16	34
N. V. D. T. A.	17	...	17
Okanagan Valley T. A.	33	37	70
Parksville D. T. A.	2	...	2
Prince George T. A.	2	1	3
Prince Rupert T. A.	14	17	31
Richmond T.A.	2	15	17
Skeena-Omineca T. A.	7	2	9
South Atlin T. A.	3	...	3
Thompson Valley T. A.	16	8	24
Trail-Rossland T. A.	17	1	18
Unattached	50	52	102
V. & D. H. E. A.	5	4	9
V. I. H. S. T. A.	28	14	42
Vancouver T. A.	306	215	521
Victoria & D. T. A.	68	17	85
West Vancouver T. A.	7	13	20
Total	1152	688	1520