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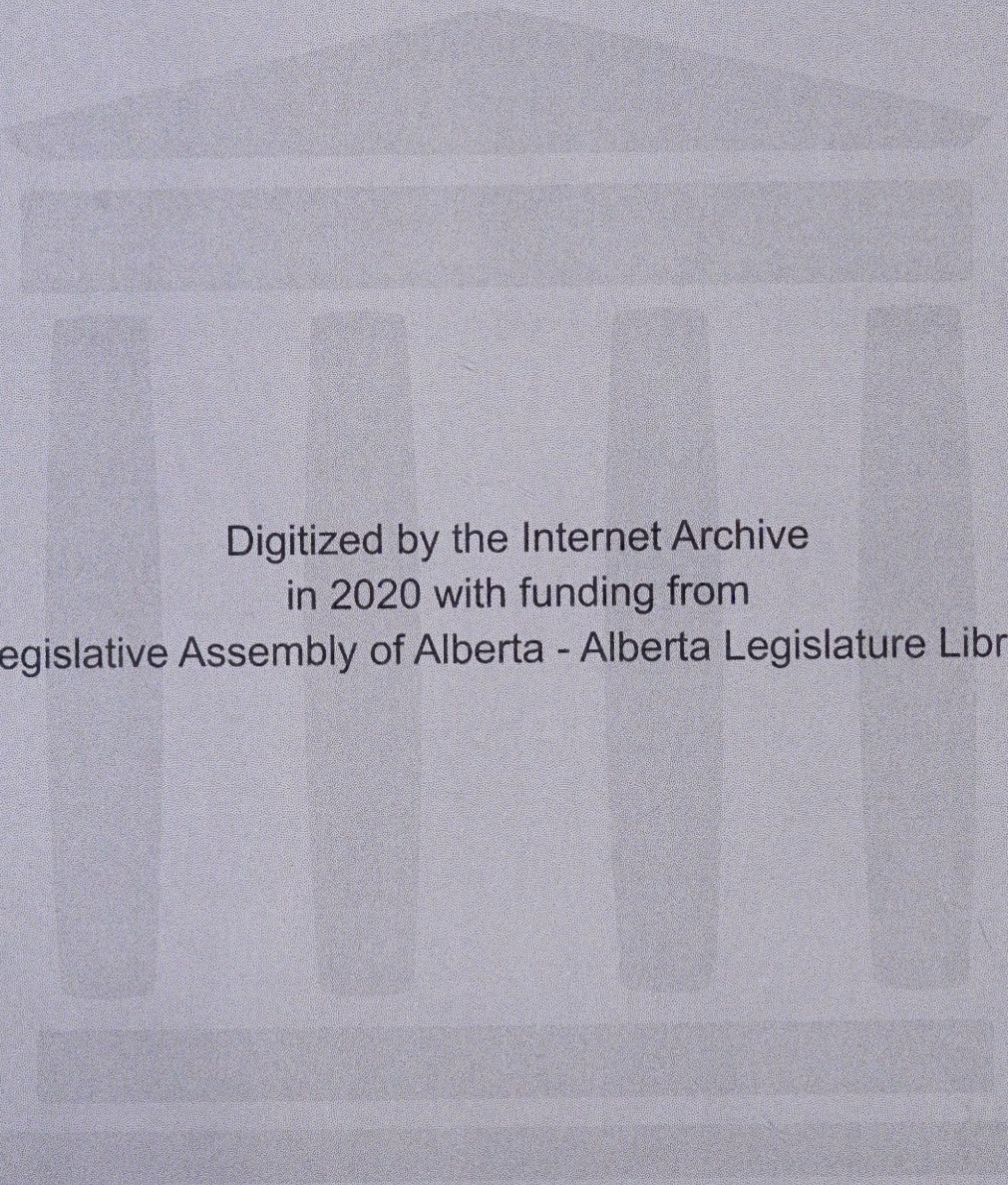
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ANNUAL REPORT

OF THE

DEPARTMENT OF EDUCATION

OF THE

NORTH-WEST TERRITORIES

1902

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REGINA :

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1903

DEPARTMENT OF EDUCATION,
REGINA, *April 15th, 1903.*

To His Honour

AMÉDÉE EMMANUEL FORGET,

Lieutenant Governor of the North-West Territories.

SIR,—

I have the honour to transmit herewith the Annual Report of the Department of Education for the year 1902.

I have the honour to be,

Sir,

Your obedient servant,

F. W. G. HAULTAIN,
Commissioner of Education

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REPORT

OF THE

DEPUTY COMMISSIONER.

DEPARTMENT OF EDUCATION,
REGINA, N.W.T., *April 15th, 1903.*

F. W. G. HAULTAIN, ESQ., M.L.A.,
Commissioner of Education.

SIR,—I have the honour to submit herewith the Annual Report of the Department of Education for the year ending December 31st, 1902.

During the year many matters of importance bearing upon the educational interests of the Territories received the attention of the Department. Among these may be cited the revision of the course of studies for Standards V—VIII, the establishment of semi-annual sessions of the Territorial Normal Schools, the preparation of a complete set of regulations governing the conduct and management of schools, and the compilation of a list of books suitable for school libraries.

GENERAL PROGRESS.

An examination of the statistics accompanying this report (Appendix A) will show a decided improvement in our educational growth. There has been a marked increase in the number of new districts formed, as well as in the number of schools brought into operation; considerable activity has been shown in the erection of improved school buildings; greater attention has been given to providing the necessary equipment and to the establishment of school libraries; the attendance of pupils in the older districts has been more regular; the average school year has been slightly lengthened except in the case of districts recently organised; and the comparatively high standing of our teaching corps has been maintained. On the whole the people of the Territories have ample reason for congratulating themselves upon the very general interest shown in educational matters, as well as upon the improvements of the past year and the outlook for the future.

EDUCATIONAL COUNCIL.

The first meeting of the Educational Council appointed under the provisions of The School Ordinance of 1901 was held at Regina on July 31st, 1902. Mr. N. D. Beck of Edmonton was elected chairman, and Mr. Jas. Short of Calgary, secretary. The Council sat for two full days considering the various matters that had been submitted to it by the Department for discussion and report. Of these the most important were the revision of the regulations governing teachers' certificates and

diplomas, and the revision of the course of studies for standards above the fifth, commonly called High School standards. Appendix H to this report sets forth the regulations and course of studies as they were finally approved by Order in Council, and Dr. Goggin's report contains a reference to the more important changes which were made, with reasons therefor.

SCHOOL DISTRICTS ORGANISED.

During the year under review the Department dealt with no less than 197 petitions for the formation of new districts, 48 of which were carried forward from 1901. Of the total petitions considered 119 resulted in the erection of districts, 29 were either abandoned or defeated, and 49 were carried forward for future consideration. Of the 119 districts formed 11 are situated in Saskatchewan, 39 in Assiniboia, and 69 in Alberta. The name, number and general location of each of these districts will be found in Appendix K.

As the number of districts organised each year is an evidence of the growth in settlement as well as of the interest taken in educational matters, the following figures are of value as indicating the annual increase for the years 1896-1902, inclusive,—40, 21, 22, 51, 49, 83, 119.

While the number of districts formed last year exceeds that of the previous year by 36 these figures do not represent the ever increasing demand for schools. Since the 31st of December, 1902, petitions for the organisation of districts have been pouring into the Department from every part of the Territories. Up to the 15th April (the date of writing this report) no less than 108 petitions had been received, which, with the 49 carried forward from last year, makes a total of 157 petitions dealt with since January 1st last.

DEBENTURE INDEBTEDNESS.

Proceedings to borrow money by debentures were taken last year by no less than 143 districts. Of these 137 received authority to issue bonds to the extent of \$141,175.00. The number of debentures registered in the Department during the year was 123 representing a face value of \$114,900.00.

As will be noted by referring to Table 8 in Appendix A these figures represent a marked increase. This increase may be graphically illustrated as follows: The number of districts authorised during each of the past five years to raise money by debentures was 39, 33, 61, 74 and 137, while the number of debentures registered during each of these years was 30, 29, 52, 63 and 123. The face value of debentures registered has increased from \$20,433.00 in 1898 to \$114,900.00 in 1902.

SCHOOL HOUSES AND EQUIPMENT.

That the people of the Territories are alive to the value of good school accommodation is evidenced by the increased number of improved buildings erected. As a rule good schools are only to be found in good school houses. In any locality a commodious, well furnished and well equipped school building is evidence of the progressive spirit of its citizens and a guarantee of its future prosperity. Of the many districts that erected buildings during the past year Edmonton leads with an expenditure of

\$33,000.00 for a new central school. Calgary follows with an outlay of \$12,125.00 while some seven other towns and villages expended over \$4,000.00 each. The total amounts expended by all districts, as shown by their annual financial statements, aggregated \$138,482.89, an increase of \$51,672.14 over the preceding year.

As regards equipment and apparatus, the figures given in Table 7 of the statistics for the year indicate that a majority of districts are making an earnest effort to comply with the requirements of the Department. At the same time, however, it might be well to point out that of the 343 departments that failed to secure a grant on the basis of the inspectors' reports for 1902 no less than 143 lost the grant on account of inadequate equipment.

During the past year there has been a more general observance of the law requiring districts to insure their school buildings. The returns received by the Department show that 541 districts carry insurance on their buildings to the extent of \$461,437.00. As the figures for 1901 were respectively 398 and \$327,406.66, it can readily be seen that trustees are taking a greater interest in this important matter.

RECEIPTS AND EXPENDITURES.

The figures given in Table 9, Appendix A, were compiled from the annual financial statements received from 626 to 640 districts that had schools in operation last year. The total receipts of these districts amounted to \$827,901.85, or an increase of \$207,339.09 over the previous year. The principal sources of revenue were, in round numbers—sale of debentures \$112,000.00, taxes \$337,000.00, grants \$153,000.00, temporary loans \$138,000.00. The total expenditures for these districts amounted to \$735,446.70 leaving a balance of cash on hand of \$92,435.15. The main items of expenditure were—teachers' salaries \$321,000.00, officials' salaries \$20,000.00, school buildings and repairs \$138,000.00, repayment of temporary loans \$121,000.00.

ASSETS AND LIABILITIES.

The total assets of the districts referred to in the preceding paragraph are given as \$1,146,318.57, or an improvement of \$228,551.88 over those returned in 1901. In round numbers the estimated value of school buildings and grounds is \$722,000.00, furniture and apparatus \$102,000.00, and school libraries \$6,500.00. The total arrears of taxes due these districts at the close of the year amounted to \$118,000.00 of which some \$90,000.00 were owing to rural districts.

The total liabilities of districts at the end of the year were \$558,444.75 of which about \$410,000.00 were due on debentures that have not matured. The amount due to teachers was about \$53,000.00, while outstanding accounts were estimated at \$93,000.00. Compared with the returns for the year 1901 the excess of assets over liabilities shows an improvement of \$106,414.93.

ATTENDANCE.

Since the presentation of the last Annual Report the number of scholars on the registers of our schools has increased from 23,837 to 27,441. This is an increment of 3,604 as compared with 3,494 in the

preceding year. The enrolment of pupils in our public schools for the past five years is illustrated by the following figures:

16,754; 18,801; 20,343; 23,837; 27,441.

For the past year the average attendance of pupils has increased from 11,968 to 13,766, or 16 per cent. as compared with 17 per cent. for the preceding twelve months. It will also be noted that the average attendance was about 50 per cent. of the total enrolment, or in other words, out of every 100 pupils registered in our schools 50 attended regularly. While this average may be considered somewhat low it compares very favourably with the attendance secured in other parts of Canada. When it is considered that the great majority of children in rural communities have long distances to travel to school, that many are required at home to help on the farms, and that many of our new settlers are more or less uninterested in the education of their children, the attendance secured during the past year may be viewed as satisfactory.

Tables 3, 4, and 4 (a) in Appendix A summarise the above figures in convenient forms and enable them to be compared with the corresponding statistics for 1901. These tables also give a summary of the classification of pupils and make a comparison between the enrolment in the rural schools and the town and village schools.

LENGTH OF SCHOOL YEAR.

As the average length of the school year for all our schools represents the amount of schooling received by the pupils enrolled it is important that this item of statistics should be calculated as accurately as possible. For previous reports this average was ascertained by dividing the aggregate number of days all schools were open by the number of schools. This method, although followed by some of the provinces of Canada as well as by other countries and states, is clearly faulty as it does not give sufficient weight to the larger town and village schools which have several departments in operation for the full school year. To illustrate: A school having 400 pupils on the register may be open 200 days while one having 30 pupils enrolled may be open only 50 days. If the method referred to is followed in calculating the average length of the school year for these two schools it will be found to be $(200 \text{ days} + 50 \text{ days}) \div 2 = 125 \text{ days}$, a result which at a glance will be seen to be at variance with the facts.

In calculating the average number of days our schools were open during the year 1902 the Department has adopted the method followed by the Bureau of Education of the United States. By this method the average is found by dividing the aggregate number of days all pupils attended by the average attendance for all schools. This gives an average school year for 1902 of 176.74 days as compared with 177.02 days for 1901. By a similar process of calculation the average school year for rural districts during the year 1902 is found to be 161 days while that for town and village districts was 197 days.

TEACHERS.

There were employed in our schools during the year 959 teachers of whom 438 were males and 521 females. As there were 783 rooms in operation this figure represents the number of teachers employed at any

one time. The reports received by the Department show that 176 districts or rooms changed teachers at least once during the year.

Of the 959 teachers employed 229 or 24 per cent. held first class certificates, 624 or 65 per cent. second class, 54 or 6 per cent. third class, and 52 or 5 per cent. provisional. The number of provisional certificates issued was one less than in 1901.

As an indication of the ever increasing demand for teachers it may be pointed out that during the year under consideration the Department granted 324 certificates which give the holders thereof authority to teach in our schools. Of these 324 certificates 20 first class, 71 second class and 21 third class were issued to persons who had received their professional training in the Territories, and 45 first class and 115 second class to persons who had received equivalent training elsewhere.

The amount paid by districts for teachers' salaries as shown by the financial statements received totalled \$321,145.03, or \$47,104.60 more than for the preceding year. The average monthly salary paid to all teachers was \$46.10, or an increase of \$1.10 over that for 1901. During each of the past three years the average monthly salary earned by teachers in the Territories was respectively \$44.39, \$45.00 and \$46.10.

TEACHERS' INSTITUTES AND CONVENTIONS.

The value of teachers' institutes and conventions is now universally recognised. As they meet a need that cannot be provided for by any other agency they have been accepted as essential factors in any well organised educational system. The very best teachers are continually meeting with problems in instruction and discipline; in time they lose interest in their work, they become less enthusiastic and there is a tendency to fall into "grooves of teaching" that may be decidedly objectionable. The meetings held by teachers' associations are intended to remove these retarding influences. They are not only fitted to give help where it is required but to furnish the stimulus necessary to hold teachers up to their very best efforts.

That the teachers of the Territories have been fully alive to the importance and value of such meetings is evidenced by the fact that eleven associations have been organised. A list of these, with their officers, will be found in Appendix E to this report.

During the past year these associations held four conventions, and, in addition, the Department made arrangements for seven institutes which were conducted by the Superintendent of Education. Table 13 in Appendix A contains a list of the places and dates of these meetings as well as the record of attendance at each. By referring to this table it will be seen that 409 teachers availed themselves of the opportunity to attend these meetings. As the attendance at similar gatherings held during the four preceding years was 269, 203, 194 and 260, last year's record indicates a very gratifying increase in point of numbers.

NORMAL SCHOOLS.

With the close of the year 1902 thirteen years have passed since the Government of the Territories established training schools for teachers. For the first three years these schools were under the management of the inspectors, during which time some 55 students graduated. In 1893 a step in advance was made by the organisation of the Terri-

torial Normal School with a special instructor in charge. Since then 584 students have received training for first and second class certificates and 224 for thirds. Totalling these figures it will be seen that since provision was first made for the professional training of teachers in the Territories no less than 863 students have attended the various sessions held.

During the year covered by this report only one session of the Normal School was held, commencing September 2nd and closing December 22nd. There were in attendance 92 students, 20 of whom were trained for first class certificates and 72 for second class. Of the students enrolled 45 obtained their non-professional or academic standing in the Territories, 13 in Manitoba, 25 in Ontario and 9 in other parts of Canada.

Owing to the growing demand for trained teachers referred to elsewhere in this report, it was decided towards the close of the year to arrange for an additional session of the Normal School to commence early in January, 1903. While the number of students in attendance at this session is not as large as was anticipated it is believed that in future, when it is generally known that semi-annual sessions will be held, more applications for admission will be received than can be accepted owing to the limited staff of instructors.

INSPECTION OF SCHOOLS.

The past year was a trying one for inspectors. The condition of the roads in many parts of the Territories was such during the greater portion of the year that the inspectors found it exceedingly difficult to carry on their work. In all 783 visits were made to schools in actual operation as compared with 899 in 1901. The decrease was largely due to the withdrawal of two of the inspectors from their fields in September and October for normal work.

SCHOOL LIBRARIES.

As, under the provisions of The School Grants Ordinance, it is now compulsory on the part of every district that earns a grant on the basis of inspection to expend one half of the amount thus earned on the purchase of books for a school library, the Department found it necessary during the year to have a list of suitable books prepared. In the preparation of this list the members of the committee that had it in hand were greatly indebted to the leading publishers in Canada, the United States and Great Britain who very kindly furnished sample copies of their publications for examination. In all about 1,000 books were carefully examined with a view of selecting those that would be most suitable for our schools. The completed list which has since been authorised and printed in catalogue form includes 440 volumes suitable for general reading and 159 volumes suitable for reference by pupils and teachers. Two copies of the catalogue have recently been mailed to every district in the Territories.

In order that the effect of the legislation referred to in the preceding paragraph may be noted in succeeding years the Department during the past two years required inspectors to obtain as definite information as possible respecting what has already been accomplished voluntarily in the way of establishing libraries in our schools. In their reports for

1901 they stated that 105 districts had provided libraries containing some 4,229 volumes. For the following year the figures reported are respectively 143 and 8,386. This is certainly a gratifying increase under the voluntary system. The figures given may be taken as indicating a growing sentiment in favour of the establishment of school libraries and a more general recognition of their need and usefulness as a part of the school equipment. As the first expenditures under The School Grants Ordinance for libraries will be made during the first term of the current year it may be expected that the next annual report of the Department will show a marked increase in the establishment of libraries in our schools.

SCHOOL GRANTS.

The total amount paid under the provisions of The School Grants Ordinance in support of schools for the twelve months ending December 31st, 1902, was \$15,558.41 or \$6,656.56 less than for the preceding year. For the same period it is estimated that the grants earned by the 576 rooms in operation in rural districts amounted to \$119,757.49, and the 207 rooms in town and village districts to \$48,711.75. These figures give a total grant earned by 783 departments of \$168,469.24, or an average of \$215.16 for each department as compared with \$272.72 for 1901.

Of the 783 departments in operation last year 440 earned a grant of \$6,344.29 on the basis of inspection. The amount paid for the previous year was \$5,173.83.

The following figures may prove interesting as they indicate to some extent the effect of the new system of paying grants which came into force January, 1st 1902.

When the new system was first discussed it was thought that the reduction in the grants payable to town and village districts would be much greater than those payable to rural districts. It has been found, however, that the sliding scale adopted for paying the major portion of the grant on the basis of the quantity of land assessable has so operated as to reduce the grant in the larger, wealthier, and more densely populated rural districts to the same extent as in town and village districts. Of the 576 rooms in rural districts that earned a grant last year no less than 199 received their grant on practically the same basis as the 207 departments in town and village districts. On the other hand, however, it may be pointed out that 85 rural districts contained less than 6,400 acres of assessable land and consequently received the increased grant provided by subclause (a) of clause 1 of section 3 of The School Grants Ordinance. The difference in the per diem grant payable to strong and weak districts on the basis of assessment amounted to from 30 cents to 40 cents.

Of the 573 rural schools in operation 281 or 49½ per cent. were open more than 160 days and consequently were paid the bonus provided by subclause (b) of clause 1 of section 3. As during the previous year only 47 per cent. of the rural districts in operation were open more than 160 days it will be noted that there has been a slight improvement in that respect.

While the percentage of attendance for all schools (50 per cent.) is the same as for 1901 it is well known that in a large number of districts a determined effort was put forth by trustees and teachers to secure a

more regular attendance of pupils in order that their districts might earn as large a grant as possible under the heading of attendance.

EDUCATION OF DEAF MUTES.

During the year 1902 arrangements were made for the admission of two new pupils from the Territories to the Manitoba Institute for the Deaf and Dumb. Since the agreement was first entered into with the Manitoba Government for the education of our deaf mutes 17 pupils have been enrolled. The number in attendance from the Territories at the close of last year was 13--10 boys and 3 girls. The total cost of providing for their tuition and maintenance was \$2,229.65.

Under the able management of Principal McDermid the usefulness of the institute continues steadily to improve. The latest methods of instruction have been introduced and every care is taken to provide for the health and comfort of the pupils. Considerable attention is also being devoted to the introduction of manual training as a part of the course of instruction, the object being to provide the pupils with a knowledge of some trade or handicraft that will be useful to them in after life.

Principal McDermid's report (Appendix B) will be found to contain much valuable information respecting the enrolment of pupils, methods of instruction, sanitary arrangements and other matters of interest.

RESIGNATION OF SUPERINTENDENT.

In closing this report it is fitting that reference be made to the resignation of our Superintendent of Education. In October last Dr. Goggin, for personal reasons, decided to sever his connection with the Department, and his resignation was reluctantly accepted. For more than nine years he had been closely identified with the educational growth and development of the Territories, while for a period of nearly twenty years it may be said that his was the guiding spirit in the educational development of Western Canada.

The officials of the Department, the inspectors and the thousands of teachers in the West who know his true worth best, wish him every success in his new field of labour.

I have the honour to be, Sir,

Your obedient servant,

J. A. CALDER,

Deputy Commissioner of Education.

GENERAL REPORT

FOR THE YEAR 1902.

By D. J. GOGGIN, M.A., D.C.L., Superintendent of Education.

F. W. G. HAULTAIN, ESQ., M.L.A.,
Commissioner of Education.

SIR,—I have the honour to submit for your consideration the following report :

REVISION OF THE COURSE OF STUDIES.

The course of study for Standards VI, VII and VIII has been revised, widened and the elective principle introduced. Instead of a fixed course as heretofore some subjects are obligatory, others optional and certain elective. Students intending to become teachers may offer Latin, French or German as the equivalent of certain portions of mathematics and science. The amount of English to be read has been increased very considerably and students who complete the course will have read representative selections from many of the great English authors. In Standard VII the amount of General History to be read has been increased, Geography lessened, and an elementary course in Biology and Chemistry introduced. In Standard VIII an outline of English Industrial History has been introduced. The course in Latin, French and German having been harmonised with that in the University of Manitoba, and that University having agreed to accept certain of our examinations, there is no longer any need for a matriculation examination in May—an examination which for some years has hindered classification and nearly doubled work in some of our larger schools. Before being permitted to write on the examination prescribed for a given standard, candidates intending to enter the Normal School must have passed that prescribed for the next lower standard or have submitted satisfactory evidence of scholarship equivalent thereto. This provision will tend to lessen the number of examination papers in each standard.

EXAMINATIONS.

The character of the work done in our schools cannot be measured in any broad way by examinations. I have said that even as evidences of intellectual acquirement and power they are not entirely trustworthy. "Unless the pupil leaves our schools with refined and gentle manners, with a self-control sufficient to free him from the need of external restraint and guidance, with clear knowledge of his duties and sound views of the worth of life and its prizes, with a power of growth and a thirst after knowledge, the schools have not done their best work for him, however broad and accurate his scholarship may be."

A careful scrutiny of the answer papers of the candidates who present themselves for examination each year throws light upon the character and method of certain portions of our work. These papers

are read by subexaminers who are selected from the masters of our leading schools. The following summary of the reports of these gentlemen, while indicating in what respects successful work is accomplished, dwells particularly upon defects in order that the attention of teachers may be directed to these with a view to remedying them.

LITERATURE.

Public School Leaving.

The results this year are not equal to those of last year. Apparently the prose selections have not been studied in any systematic way. Memory work is excellent. The general form of the answers has improved. The spelling and English of these candidates are better relatively than those of candidates in Standard VI. The subexaminers advise closer and more methodical study of the prose selections with compositions based thereon.

Standard VI.

The answer papers revealed a lower standard of scholarship and a greater immaturity of judgment than the subexaminers expected. The power to analyse selections and appreciate relations of parts to wholes is improving but the power to interpret selections is weak. The memorising of fine passages has been done intelligently.

There is much room for improvement in expression. The subexaminers believe that if the study of words, figurative language, and sentence structure were emphasised more, even if less emphasis had to be given to the study of plot and the method of the author, greater power and better taste in composition would be developed. Capitals are used correctly but punctuation is careless, and spelling inaccurate in many cases.

Standard VII.

The answer papers in poetical literature reveal a satisfactory knowledge of the subject matter and a general appreciation of its literary value. Evidently the teaching has been on sound lines. In general scholarship and power of interpretation these candidates are much in advance of those in Standard VI.

In the prose and literature where the candidates have been taught along the lines suggested in the Programme of Studies the answers are quite satisfactory. Where an orderly method has not been followed the results are poor. The art of the author and the literary value of the selection seem to be appreciated.

The questions in most cases called for much fuller statements than many candidates gave. Brevity secured at the expense of completeness is not desirable. Better training in modes of answering questions on paper is needed. In mechanics, spelling and language power, the candidates are generally quite up to the standard and considerable skill and taste in sentence structure are exhibited.

Standard VIII.

The work of candidates is quite satisfactory. The relation of incidents and characters to the development of the story is appreciated.

The novelist's art and purpose are realised and admired. The influence of the careful study of the authors is clearly manifested in the style of the answers, the language being generally good and at times graceful. The subexaminers recommend that the literature for this standard should be increased in amount and difficulty.

COMPOSITION.

Public School Leaving.

About half the candidates exhibited a satisfactory knowledge of the work demanded. The arrangement of matter needs more attention. A lack of definiteness in reading as well as in answering questions characterises much of the work. In question 4 some candidates give a phrase instead of the sentence required, while many gave a paraphrase. The language power as shown generally, and especially in the conversations arising out of question 2 is satisfactory, though a number of errors in English are in evidence. Such slang as "That game took the cake, it was a corker" reveals something of the teaching and much about the taught. There is a very common disregard of quotation marks and of the laws of the paragraph relating to conversations. In spelling, capitals, and penmanship the work is creditable.

The subexaminers urge that more prominence be given this subject and that more definite work be done through graded exercises and closer correlation with grammar. They urge especial attention to letter writing, making of abstracts and paraphrases, and punctuation.

ESSAYS.

Standards VI, VII and VIII.

This work is not satisfactory. The English of the essays is inferior to that of the answer papers in literature. In description the results are good but in narration, especially where conversations are given, there are many weaknesses. Exposition is quite below the standard expected.

The subexaminers suggest that candidates should be given much more practice in composition based upon the prose literature, and particularly upon topics demanding direct narration and exposition.

GRAMMAR.

Public School Leaving.

With few exceptions knowledge of the book work is satisfactory. That the reasoning power has received considerably less training than the memory is evident in the answers to questions 1, 4, and 7. The lack of definiteness in the teaching may be illustrated by one out of a number of similar answers to part of question 7: "Neither of the sentences have any advantage over the other; it depends how the thing happened as to which is used. If the boy caught the fish by force then the active should be used, but if the fish allowed himself to be caught the passive should be used."

Not enough attention has been paid to the classification of sentences and construction of clauses and phrases. The parsing, on the whole,

is correct but too many details are given. In English, capitals, penmanship and spelling creditable proficiency is shown. Punctuation is defective especially in the parsing where contractions and abbreviations appear with rarely an accompanying mark, e.g., *her pro dem* used as *adj mod sister*. The answer papers from some schools showed that the pupils had not been trained in the mechanics of composition, e.g., leaving margins, numbering answers, etc.

Standard VI.

The knowledge of the book work is good but there has been negligence in causing pupils to see the reasons for conclusions in grammar. Evidently they have not had sufficient practice in solving grammatical problems for themselves, and the subexaminers suggest that pupils do more thinking and teachers less telling. Failure through careless reading to grasp the essential element in a question is far too common. Pupils have not been taught to do analysis neatly and systematically. The English of the answers is much better than the logical arrangement.

Standard VII.

The work in this standard is distinctly in advance of that in the previous standard yet the power to analyse sentences correctly and methodically is somewhat weak. On the rhetoric part of the paper candidates write at too great length, and sometimes recklessly. Paragraphs are written where a single sentence is sufficient answer to the question asked.

Standard VIII.

The subexaminers again draw attention to the work in analysis. They consider analysis an excellent test of a candidate's power and urge special attention to it. In rhetoric the answers to the questions on paragraph structure were least satisfactory.

HISTORY.

Public School Leaving.

The work of about one-fifth of the candidates is in every respect creditable. The remainder seem to have read the book and memorised much with questionable accuracy. One subexaminer remarks, "Many candidates have learned by heart some of the numerous history note books instead of studying the text and reasoning about the great facts of history." Another says, "The methods employed in teaching this subject would appear to be somewhat loose. The skeleton of the subject has not been put together as it should be and the pupil has not the rallying points, mentally speaking, around which to arrange his ideas." There is a tendency to make sweeping statements without giving specific examples to establish such general assertions. Many wander away from the point and introduce side issues which have little or nothing to do with the question asked. Most of the candidates have no clear idea of how our country is governed, the answers to question 4

indicating general confusion on this topic. The map work of about twenty candidates is excellent. Language, spelling and mechanics are generally good. The best work is shown in the answers to questions 1, 3 (first part), 6, 7 and 8.

The subexaminers urge that the so called "history note books" be thrown away, that pupils be trained to reason more, that more attention be given to obtain clear, definite ideas of the great periods of English History without so many details, that comparison be used to a greater extent in teaching, and especially that pupils in this standard be given a clear notion of the government under which they live.

Standard VI.

Knowledge of events, of lines of development, etc., is not definite enough. The actual condition of the people at important periods seems to have been given careful study. The tracing of cause, course, and effect of events has not received sufficient attention. In arrangement of matter, spelling, writing, punctuation and English a very fair standing has been attained.

Standard VII.

British and Canadian History.—The knowledge of facts is fair. Questions 3 and 6 are tests of the candidate's power to reason and it is on these that the best answers are given. In many of the answer papers the arrangement of matter and modes of expression are very satisfactory, not a word crossed out or misspelled, not an error in grammar.

General History.—The knowledge exhibited on this paper is much in advance of that on the previous one. The questions called for description and exposition and the candidates did well on each. The answers to question 2 show that maps have not been used sufficiently. General history appears to be a popular subject with these candidates.

Standard VIII.

General History.—The subexaminers report a tendency to make broad general statements without noting important exceptions or modifying conditions. They suggest a revision of the course in history prescribed for this standard.

Constitutional History.—Generally, the candidates appear to have read the text carefully but the answers as a rule are not complete enough for this standard. Such candidates may fairly be expected to stand off, as it were, from a subject and see it as it branches out. In question 7 very few saw that they should speak of (a) preceding conditions, (b) the gradual, not sudden, growth of responsible government, (c) the successive steps following the Union Act, (d) how the Union Act affected the history of constitutional government in the other provinces.

GEOGRAPHY.

Public School Leaving.

General knowledge of the subject is fair. The study of ocean currents, rainfall and winds, so far as the facts are concerned, has been done carefully but pupils are unable to make the applications called for

in this paper. The power to make the comparisons asked for in question 4 is weak. Apparently, memorising is done more effectively than reasoning is. The answers to question 7 show that current geography is receiving attention. Pupils failed quite generally in giving the boundaries of river basins and did not always distinguish between river basins and river systems. Map drawing, with some excellent exceptions, is poor, and the subexaminers draw special attention to the need for more practice in drawing outline maps. English and spelling are good but paragraphing, punctuation and use of capitals are not satisfactory.

Standards VI and VII.

The subexaminers report the work covered generally but the answers are not as definite as they expected. Map drawing and mathematical geography have received insufficient attention.

ARITHMETIC AND MENSURATION.

Public School Leaving.

Assuming this paper to be a fair test the arithmetical knowledge of the candidates is deficient. Some candidates know so little of this subject that one wonders who advised them to write. Inaccuracy in calculation, especially where fractions enter in, is a marked feature of the work. The reasoning of the better candidates is very fair but there is room for additional training in the expression of this reasoning. Too many candidates think more of getting the answer than of presenting a logical solution in good English. From some schools where proper statement of the reasoning has had due care excellent solutions are presented with paragraphing, punctuation, and capitals as carefully attended to as in a composition exercise. The subexaminers again refer to the advantages of keeping calculation and reasoning separated on the answer papers.

The prescribed mensuration appears to have been taught successfully.

Standard VI.

Inability to read the questions intelligently seems a too common cause of failure. Reasoning power is good but the expression of this reasoning in logical order and good English, while an improvement on last year's work, is still not up to standard. Mensuration is fair and would probably be rated good if candidates had used drawing to assist them in solving problems. The metric system is not very well understood.

Standard VII.

Exchange and Stocks have not been taught in such a way as to meet the requirements of this paper. The metric system has evidently not been learned in a concrete way. Neglect to draw figures is the prime cause of failure in a number of solutions in mensuration. Solutions are expressed, as a rule, neatly, logically and in good English.

ALGEBRA AND GEOMETRY.

Standard V.

The pupils' general knowledge of Algebra is fair, of Geometry good. The grouping of factors and indicating of steps in the equations

in question 4 are good. Quite a number of candidates do not know the meaning of the terms used in questions 1, 8 (a), 10 (a) and 13 (a). Some multiplied out the quantities in question 2 instead of grouping and performing the operation by factors. Many gave the elementary factors in question 3 without indicating the steps in process. Some candidates err in taking particular cases for generals in questions 9 (b), 10 (c) and 12 (b). In proving that a perpendicular is the shortest distance from a point to a straight line, the method of Euclid (I. 20) is used frequently instead of that of Hill. The subexaminers urge that candidates should not be permitted to take up Euclid in connection with Hill since the methods differ in many respects and confusion ensues. The spelling and writing are good, the work as a rule neat and well arranged—especially so in geometry.

ALGEBRA.

Standards VI and VII.

General knowledge is fair. Many candidates write equations carelessly and this is a fruitful cause of error in solutions. There are a number of failures in H.C.F., L.C.M. and the use of negative signs. The language used in definition is not exact.

Standard VIII.

The preparation made by these candidates is not considered satisfactory. One examiner says: "Candidates draw general conclusions from too few particulars. They have not mastered fundamental theorems so as to be able to apply them. They use long methods instead of the shorter ones which candidates at this stage should know how to employ. Algebra appears to be treated as if it were arithmetic.

GEOMETRY.

Standard VI (VII).

Many of the candidates have not covered the prescribed work carefully. They do not clearly distinguish inductive and deductive reasoning. Definitions have not been learned in any exact way. The drawing of the diagrams is often so inaccurate as to lead to positive error in reasoning.

The subexaminers have neglected to report upon the work of candidates from Standard VII.

Standard VIII.

The propositions are, as a rule, written out correctly and neatly. Deductions and questions based upon the propositions are seldom attempted. It is evident that memory is playing an important part in this subject. The examiners urge that, through marks or otherwise, the value of deductions be emphasised.

TRIGONOMETRY.

The candidates did fairly well on this paper every question except No. 9 being attempted.

PHYSICS.

Standard VI.

Candidates, as a rule, appear to have covered the prescribed work but not thoroughly; they are unable to apply the principles they have learned. This is attributed to the extent of the course and the lack of time for drill in applications. Candidates know the metric tables but do not know the relations between the measures of length, capacity and weight. They seem to understand the principles of Specific Gravity but fail in making the applications and working the problems. The sub-examiners urge that questions in this subject especially should be expressed in very definite language and that problems or questions about which there may be doubt—such as those on the needle, the classification of sealing wax, and the specific gravity of salt—should be omitted.

The English and spelling are good, the writing fairly good—some of it excellent, the arrangement of matter in most cases such as to make it easily read and understood, the drawing quite satisfactory.

Standard VII.

One subexaminer says: "Since half of the questions consist of applications of principles contained in Standard VI work, and since most of the answers are not correct, one would judge that there has not been sufficient drill on that part of the work. This difficulty has been in evidence in previous years. Candidates from Standard VII do better on the second part of the paper than on the first part which they prepared the previous year. With the exception of Sound Interference the candidates seem to know the book work fairly well."

Another subexaminer says: "The candidates' answers indicate a fairly complete knowledge of definitions and principles but a very general inability to apply this knowledge in special cases. This application very properly forms an important part of a paper on any such subject, so that weakness here is serious. When the principles are once established the pupils' reasoning powers should be developed by requiring them to make many applications of the knowledge gained. Herein our work seems defective. My impression—derived from experience in the class room and confirmed by these answer papers—is that we are endeavouring to cover too much ground in the time we have to devote to this subject. When the mere principle has been established it is found necessary to push on to the next division of the subject though more effective work can be done just then through thorough applications of the truths and principles taught or investigated. The course should be shortened."

Standard VIII.

Knowledge of the metric system is defective. The work on Electricity is well done but that on Fluid Pressure, Specific Gravity and Sound has not been well prepared. Careless reading of questions 1 and 4 is the cause of a number of errors.

BIOLOGY.

Standard VIII.

The mental immaturity of many candidates is evident in their

applications of principles. Although specific answers are required, in questions 2 (b), 5 and 6 many answers are couched in general terms. Few candidates have learned how to use a microscope in a practical way. One specimen, examined under the microscope, is described as "a cell of a yeast plant," "a cross section of a leaf," "a longitudinal section of a root," "a cross-section of an earth-worm," none of which are correct. A few candidates are well prepared.

NATURE STUDY AND AGRICULTURE.

Standard V.

Many of the candidates have received careful instruction in these branches. The answers in Nature Study are better than those in Agriculture. Candidates have been trained to observe pretty carefully and the inferences based upon observation reveal clear thinking. The sub-examiners suggest greater attention to the principles underlying the various farming operations. English, writing and spelling are fairly satisfactory but insufficient attention is given to punctuation and margins.

AGRICULTURE AND BOTANY.

Standard VI.

The general knowledge of the work is good though the meaning of specific terms is weak. Many failed to distinguish "Monoecious" and "Dioecious" and as a result obtained few marks on question 5 though they had a fair grasp of the different methods of fertilisation. Few obtained full marks on questions 2 and 6. In Agriculture conditions in different parts of the Territories vary considerably and the answers often show a better knowledge of local practices than of foundation principles. Too many candidates fail to read a question carefully, word by word, and, through failure to grasp the meaning of a word or the significance of a phrase, miss the purpose of the question. The papers for the most part are well written and well arranged though the drawing is not up to the usual standard, nor are the descriptions quite as exact as they should be.

Standard VII.

Taken altogether the candidates have answered the questions well. The paper is not difficult and, as the questions are within the prescribed work, there is no reason why any candidate who has covered the course should fail to obtain over 50 per cent. The answers on plant cells and tissues reveal the chief weakness, while the question on the growth of the stem brings out a variety of answers due to different interpretations of the phrase "mode of growth." About half of the candidates identified the specimen submitted.

HYGIENE AND TEMPERANCE.

Standard V.

The knowledge of the candidates as revealed in these answer papers is fair to good. The first four questions are answered well. The

answers to questions 5 and 6 cause one subexaminer to say "Temperance is evidently taught in intemperate language. An extreme view is held and a vulgar method employed in describing the effects of alcohol and tobacco." Another says, "Teachers should assuredly be much more careful than they are in the statements they make before their classes when teaching this branch."

BOOK-KEEPING.

Standard VI.

The answers indicate that not many of the candidates have such a grasp of principles as to enable them to use their knowledge in a truly practical way. Many are able to write the entries in a ledger and do the formal, mechanical work well without having any very clear idea of the transaction occurring in actual business. They can write a check readily and accurately when asked to do so, but when asked to write the document used in withdrawing \$150.00 from a bank they are puzzled. It is suggested that candidates be made familiar not only with the forms used but also with the circumstances under which such forms or documents would be required.

NATURE STUDY.

The work in this branch is proceeding as in former years, but when so much is said elsewhere about the school garden as a "new development" it may be of interest to give definite illustrations of what some of our schools have been doing in this matter. At my request Inspector Perrett, who takes a warm interest in this work, has furnished the following sketch from his notes of this year:

Le Cain S.D., Miss E. S. Smith, teacher. The grounds are not fenced. Each pupil cultivates a flower plot, plants the seeds, waters and cares for the growing plants, and weeds his own plot. The school as a whole cultivates and cares for a creditable vegetable garden made upon the fireguard about the building.

Sims S. D., Miss A. B. Coulter, teacher. The grounds are fenced. The pupils, mostly Germans, are divided into groups of four or five, each group having a senior pupil as captain. Each group has its own flower plot neatly walled about with whitened stones and enclosed with a small woven wire fence.

Southgate S. D., Mr. W. Harvey, teacher. The grounds are fenced. The pupils are English and French. The teacher with the assistance of the pupils has dug and planted a small plot and built around it a fence about four feet high, made of closely woven willows. In this school is a picture, "Pussy Willows," appropriately framed with the smaller branches of the Pussy Willow.

Minerva S. D., Mrs. B. Harvey, B.A., teacher. The grounds are fenced. The pupils are Icelanders. Vegetable and flower plots are cultivated on the fireguards and a few trees have been planted.

St. Istvan S.D., Mr. John O'Brien, teacher. The grounds are fenced. The pupils are Hungarians and Bohemians. In this school extensive and elaborate plans for tree culture are employed. Many hundreds of trees have been planted and these have been placed along the fences and across the grounds forming avenues and driveways. In

addition to these trees there are hedges of roses and carragana, and flower and vegetable plots are cultivated.

Wolseley School, Mr. J. F. Middlemiss, principal. This is a town school in which considerable attention is given to this phase of work. Several hundred trees have been planted and are growing. The front portion of the grounds has been divided into plots of various shapes and sizes and each class has its own flower plot.

These illustrations are sufficient for the purpose in view. Mr. Perrett adds: "In all schools where such work is carried on intelligently I find pupils taking an interest and even pride in it, willing to do all in their power to make it a success, and planning for additional work next year. In other schools this work is but in its infancy, yet where it has been zealously attempted, no matter on what scale, I find a corresponding care and interest in the general appearance and condition of the school fences and school buildings. In such schools one cannot fail to observe the general neatness of the pupils in dress and school work. Some schools became disheartened at their want of success in growing trees or plants, forgetting or ignoring the fact that planting is but one step in the process and that profit and pleasure depend upon steady culture throughout the season. The best work is done in those schools where the teacher, while inspiring and guiding the pupil's activities and energies, assists him to obtain an intelligent understanding of Nature's processes."

TEACHERS' INSTITUTES.

During May and June, assisted by Miss Burnett of the Normal School staff, and Mr. Bennett, Supervisor of Manual Training Classes, I conducted Teachers' Institutes at Prince Albert, Carnduff, Indian Head, Edmonton, Red Deer, Calgary, Moosomin and Yorkton. Considering the condition of the roads this season the attendance was satisfactory and the interest taken in our work very gratifying. The teachers testified in warmest terms their appreciation of Miss Burnett's very helpful addresses on Drawing, Music and Picture Study. Mr. Bennett's enthusiastic presentation of Manual Training was everywhere followed with the keenest interest. I gave addresses on Arithmetic, Nature Study, Composition and Reading. I regret that it was impossible within the time at our disposal to visit other centres from which we received urgent invitations. Inspectors and teachers are agreed as to the value of these institutes and the desirability of holding them every year.

CONCLUSION.

Early in October, for family and financial reasons, I asked permission to resign the Superintendency which I have held for nine years and a half.

The three-fold increase in schools and four-fold increase in pupils, the establishment of the Normal School, Teachers' Institutes, Reading Classes and School Libraries, the improvement in the qualifications of teachers, the gradual elevation of the Course of Studies and the introduction of plans for the more equitable division of school grants are some of the important features that mark progress during this period. In higher educational ideas, in wider scholarship, in more humane discipline, in closer and kindlier relations between teachers and parents,

and in ampler remuneration for teaching there has been steady advance. The full effect of these during this formative period in the life of the Territories cannot be estimated now.

In severing my official connection with the Department of Education permit me to say that the relations existing between the Executive, the officials, the inspectors, teachers and myself have at all times been cordial, and that for the sympathy, co-operation, and encouragement of these and the people of the Territories I am deeply grateful.

To yourself as Head of the Department I owe more personally and professionally than I am able to express.

I have the honour to be,

Sir,

Your obedient servant,

D. J. GOGGIN,
Superintendent of Education

APPENDICES.

APPENDIX A.

STATISTICS.

GENERAL SUMMARY.

Number of school districts.....		832
Increase for the year.....	119	
Number of districts having schools in operation.....		640
Increase for the year.....	76	
Number of departments in operation.....		783
Increase for the year.....	101	
Number of pupils enrolled.....		27,441
Increase for the year.....	3,604	
Average attendance of pupils.....		13,766
Increase for the year.....	1,798	
Percentage attendance of pupils.....		50%
Increase for the year.....		
Average length of school year—days.....		176.74
Decrease for the year.....	28	
Total grants earned by school districts.....		\$168,469.24
Decrease for the year.....	\$17,252.32	
Total grants paid to school districts.....		\$155,558.41
Decrease for the year.....	\$6,656.56	
School debentures authorised.....		\$141,175.00
Increase for the year.....	\$31,965.00	
School debentures registered.....		\$114,900.00
Increase for the year.....	\$24,540.00	
Amount expended on school buildings and grounds.....		\$146,308.22
Increase for the year.....	\$51,007.72	
Amount expended for teacher's salaries.....		\$321,145.03
Increase for the year.....	\$47,104.60	
Amount expended for all other purposes.....		\$268,013.45
Increase for the year.....	\$34,545.10	

1.—SCHOOL DISTRICTS.

CLASS	IN EXISTENCE DECEMBER 31, 1901.				ERECTED DURING 1902			
	Assa.	Alta.	Sask.	Total.	Assa.	Alta.	Sask.	Total.
Public.	362	251	77	690	39	68	11	118
Separate. ...	6	7	3	16				
Unorganisd	3	2	2	7		1		1
Totals. . .	371	260	82	713	39	69	11	119

*These are in outlying settlements in which schools are maintained partly by Government aid. They have not been formally established as districts.

2.—NUMBER of Schools open during the years 1901 and 1902, and Departments in each.

SCHOOLS having	Assa.		Alta.		Sask.		Total Schools		Total Depts.	
	1901	1902	1901	1902	1901	1902	1901	1902	1901	1902
1 Department.....	307	321	169	212	48	54	523	587	523	587
2 ".....	6	11	7	11	5	3	18	25	26	50
3 ".....	5	4	3	5	.....	2	8	11	24	33
4 ".....	2	3	4	4	.....	.....	6	7	24	28
5 ".....	.....	.....	.....	1	.....	.....	.....	1	.....	5
6 ".....	1	.....	.....	.....	1	1	2	1	12	6
7 ".....	1	1	2	1	.....	.....	3	2	21	14
8 ".....	.....	1	.....	1	.....	.....	.....	2	.....	16
9 ".....	2	1	1	.....	.....	.....	3	1	27	9
10 ".....	.....	1	.....	1	.....	.....	.....	2	.....	20
14 ".....	.....	.....	1	.....	.....	.....	1	.....	14	.....
15 ".....	.....	.....	.....	1	.....	.....	.....	1	.....	15
Totals.....	324	343	187	237	54	60	564	640	681	783

3.—ATTENDANCE OF PUPILS.

AT ALL SCHOOLS.	1901	1902	Increase
No. of pupils attending school during year	23,837	27,441	3,604
No. of boys " " " "	12,310	14,241	1,931
No. of girls " " " "	11,527	15,200	1,673
Total aggregate attendances for 1st term..	1,160,263	1,322,417	162,154
" " " " 2nd " ..	958,407	1,110,689	152,282
" " " " year.	2,118,670	2,433,106	314,436
Total average attendance for year.	11,968	13,766	1,798

4.—CLASSIFICATION OF PUPILS.

STANDARDS.	1901	1902	INCREASE	Per cent. of Enrolment
Standard 1, Part 1.....	6,912	7,925	1,013	28.88
“ 1, Part 2	3,933	4,545	612	16.56
“ 2.....	4,343	5,097	754	18.57
“ 3	4,519	5,008	489	18.23
“ 4.....	2,566	3,037	471	11.08
“ 5.....	1,050	1,248	198	4.54
“ 6.....	301	331	30	1.20
“ 7.....	174	215	41	.78
“ 8.....	39	35	4	.13
Totals.....	23,837	27,441	3,604	100.00

4 (a)—COMPARATIVE Statement of Attendance and Classification of Pupils in Rural and Town and Village Schools.

	Rural Schools	Town and Village Schools
Number of pupils enrolled.....	15,679	11,762
Aggregate day's attendances of pupils.....	1,253,649	1,179,457
Daily average attendance of pupils.....	7,774	5,992
Percentage of attendance to total enrolment. . .	49.58	50.95
Average length of school year—days.....	161	197
Average number of pupils enrolled in each department.....	27	57
Classification.—Standard 1, Part 1.....	4,647	3,278
“ 1, Part 2.....	2,651	1,894
“ 2.....	3,027	2,070
“ 3.....	2,946	2,062
“ 4.....	1,756	1,281
“ 5.....	564	684
“ 6.....	79	252
“ 7.....	9	206
“ 8.....	.....	35
	15,679	11,762

Note.—The statistics in the above table were compiled from the returns received from 573 rural districts (including 5 unorganised districts) and representing 576 departments, and 67 town and village districts representing 207 departments.

5.—LENGTH of School Year.

Number of schools open between 21 and 50 days.....	17
“ “ “ “ 51 “ 100 “	49
“ “ “ “ 101 “ 150 “	189
“ “ “ “ 151 “ 200 “	164
“ “ “ over 200 days.....	221
Total.....	640

6.—TEACHERS Employed. Certificates and Salaries.

Class of Certificate	Schools open the whole year						Schools open part of the year								
	No. of teachers	Salaries per month						No. of teachers	Salaries per month						
		Highest		Lowest		Average			Highest		Lowest		Average		
		\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.	\$	c.
First, male.....	109	108	33	40	00	60	15	34	52	50	39	38	47	00	
“ female.....	57	66	66	33	33	46	42	29	55	00	40	00	45	58	
Second, male.....	111	75	00	40	00	45	88	148	60	00	40	00	45	48	
“ female.....	191	60	00	25	00	43	25	173	60	00	35	00	43	40	
Third, male.....								13	45	00	37	50	41	68	
“ female.....	7	45	00	33	33	40	00	34	45	00	35	00	40	50	
Permit, male.....								23	57	50	40	00	45	21	
“ female.....	2	45	00	35	00	40	00	27	50	00	35	00	40	00	
Kindergartner.....	1					41	66								

Certificate	No. of teachers	Town Schools						No. of teachers	Village Schools						
		\$	c.	\$	c.	\$	c.		\$	c.	\$	c.	\$	c.	
First, male.....	42	108	33	45	00	74	38	26	77	50	45	00	55	86	
“ female.....	36	60	00	37	50	46	33	9	66	66	41	66	50	00	
Second, male.....	14	75	00	45	00	53	00	11	75	00	45	00	52	17	
“ female.....	83	60	00	25	00	45	60	42	50	00	33	33	41	27	
Third, male.....															
“ female.....								2	41	66	33	33	37	50	
Permit, male.....															
“ female.....	1					45	00								
Kindergartner.....	1					41	66								

Certificate	No. of teachers	Yearly Rural Schools						No. of teachers	In all Schools						
		\$	c.	\$	c.	\$	c.		\$	c.	\$	c.	\$	c.	
First, male.....	41	65	00	40	00	48	00	143	108	33	39	38	56	94	
“ female.....	12	50	00	33	33	44	00	86	66	66	33	33	46	00	
Second, male.....	86	65	00	40	00	43	90	259	75	00	40	00	45	65	
“ female.....	66	50	00	35	00	41	50	364	60	00	25	00	43	28	
Third, male.....								13	45	00	37	50	41	68	
“ female.....	5	45	00	35	00	41	00	41	45	00	33	33	40	41	
Permit, male.....								23	57	50	40	00	45	21	
“ female.....	1					35	00	29	50	00	35	00	40	27	
Kindergartner.....								1					41	66	

Total number of teachers employed during the year.....959
 “ “ “ “ at one time.....783
 Average salary per month paid to all teachers employed.....\$46 10
 Altogether there were 176 schools or rooms that changed teachers during the year.

7.—SCHOOL Houses and Equipment.

Compiled from Inspectors' Reports for 1902.

School houses (material):

Log.....	138
Frame.....	412
Brick.....	31
Stone.....	32
Other material.....	13
No. of districts that have provided wells at the school.....	148
No. of wells from which good water is obtained.....	98
No. of schools provided with insufficient black board space.....	96
“ “ having a satisfactory system of ventilation.....	167
“ “ furnished with unsatisfactory desks.....	113
“ “ provided with a school library.....	143
Total number of volumes in these libraries.....	8,386
No. of schools provided with:	
Numeral frame.....	387
Reading tablets.....	216
Set of dry measures—pint, quart, gallon, etc.....	103
Sand modelling board.....	46
Dictionary.....	312
Globe.....	452
Map of World.....	448
“ “ Canada.....	411
“ “ North-West Territories.....	96
“ “ North America.....	305
Set of drawing models.....	52
Music chart.....	19

8.—SCHOOL District Debentures.

YEAR	DEBENTURES AUTHORIZED		DEBENTURES REGISTERED.	
	No. of School Districts.	Amount.	No. of School Districts.	Amount.
1898	39	\$ 23,985 00	30	\$ 20,433 00
1899	33	54,550 00	29	42,750 00
1900	61	94,500 00	52	77,800 00
1901	74	109,210 00	63	90,360 00
1902	137	141,175 00	123	114,900 00

9.—RECEIPTS and Expenditures.

Summary of Receipts and Expenditures of all School Districts for the year 1902.

<i>Receipts.</i>	
Cash on hand, December 31, 1901.....	\$ 73,123 76
Proceeds of debentures.....	112,330 50
Taxes collected.....	336,682 77
Government grants.....	152,860 27
Pupils' fees.....	2,174 07
Borrowed by note.....	138,158 99
Amounts advanced by treasurers.....	1,607 85
Other sources.....	10,963 64
	\$827,601 85
<i>Expenditures.</i>	
Teachers' salaries.....	\$321,145 03
Officials' salaries.....	19,939 63
Paid on debentures.....	50,922 74
Paid on notes—including interest.....	121,489 22
School buildings and repairs.....	138,482 89
School grounds.....	7,825 33
School furniture.....	17,298 10
Library and reference books.....	1,002 21
Apparatus and equipment.....	5,179 21
Supplies, stationery, etc.....	7,551 02
Caretaking and fuel.....	29,196 16
Insurance.....	4,825 07
Other expenditures.....	10,610 09
Balance on hand, December 31, 1902.....	92,435 15
	\$827,901 85

Note.—The above table has been compiled from the Annual Financial Statements received from 559 rural districts and 67 town and village districts.

9 (a).—COMPARATIVE Statement showing Receipts and Expenditures of Town and Village Districts and Rural School Districts for the year 1902.

	Town and Village Districts	Rural Districts
<i>Receipts.</i>		
Cash on hand, December 31, 1901.....	\$ 42,377 57	\$ 30,746 19
Proceeds of debentures.....	57,138 38	55,192 17
Taxes collected.....	152,015 24	184,667 53
Government grants.....	54,549 23	98,311 04
Pupils' fees.....	1,456 73	717 34
Borrowed by note.....	84,237 18	53,921 81
Amounts advanced by treasurer.....	920 24	687 61
Other sources.....	7,364 20	3,599 44
	\$400,058 72	\$427,843 13
<i>Expenditures.</i>		
Teachers' salaries.....	\$120,950 13	\$200,194 90
Officials' salaries.....	6,111 37	13,828 26
Paid on debentures.....	30,902 08	20,020 66
Paid on notes—including interest.....	73,140 70	48,348 52
School buildings and repairs.....	77,605 45	60,877 44
“ grounds.....	3,937 08	3,888 25
“ furniture.....	6,819 94	10,478 16
Library and reference books.....	361 36	640 85
Apparatus and equipment.....	1,417 84	3,761 37
Supplies, stationery, etc.....	2,776 13	4,774 89
Caretaking and fuel.....	18,153 29	11,042 90
Insurance.....	2,161 82	2,663 25
Other expenditures.....	4,918 75	5,691 34
Balance on hand, December 31, 1902.....	50,802 81	41,632 34
	\$400,058 72	\$427,843 13

10.—ASSETS and Liabilities.

Summary of assets and liabilities of all school districts for the year 1902.

<i>Assets.</i>	
Cash on hand.....	\$ 92,435 15
Arrears of taxes due.....	118,068 11
Government grants due.....	83,791 17
Estimated value of land and buildings.....	721,669 32
“ “ “ furniture and apparatus.....	162,490 34
“ “ “ school libraries.....	6,462 15
Other assets.....	21,402 33
	\$1,146,318 57
<i>Liabilities.</i>	
Teachers' salaries.....	\$ 53,108 38
Debenture indebtedness.....	410,686 45
Outstanding accounts.....	93,042 07
Amount due treasurers for moneys advanced.....	1,607 85
Excess of assets over liabilities.....	587,873 82
	\$1,146,318 57

10 (a)—COMPARATIVE Statement showing Assets and Liabilities of Town and Village School Districts and Rural School Districts for the year 1902.

-----	Town and Village Districts	Rural Districts
<i>Assets.</i>		
Cash on hand.....	\$ 50,802 81	\$ 41,632 34
Arrears of taxes due.....	27,817 12	90,250 99
Government grants due.....	23,128 03	60,663 14
Estimated value of land and buildings.....	422,712 38	298,956 94
“ “ “ furniture and apparatus.....	38,579 88	63,910 46
“ “ “ school libraries.....	3,285 71	3,176 44
Other assets.....	18,548 16	2,854 17
	\$584,874 09	\$561,444 48
<i>Liabilities.</i>		
Teachers' salaries.....	\$ 7,210 65	\$ 45,897 73
Debenture indebtedness.....	276,765 07	133,921 33
Outstanding accounts.....	55,194 94	37,847 13
Amounts due treasurer.....	920 24	687 61
Excess of assets over liabilities.....	244,783 19	218,353 85
	\$584,874 09	\$561,444 48

11.—CERTIFICATES Granted.

	N.W.T.	Other provinces	Total	Grand totals
I. Licences to teach.				
<i>(a) Interim Certificates</i>				
1st Class to N.W.T. teachers.....	20	..	20	
“ teachers from Ontario.....	..	37		
“ “ “ Manitoba.....	..	3		
“ “ “ Quebec.....	..	..
“ “ “ Nova Scotia.....	..	2		
“ “ “ New Brunswick....	..	3	45	65
2nd Class to N.W.T. teachers.....	71	..	71	
“ teachers from Ontario.....	..	92		
“ “ “ Manitoba.....	..	13		
“ “ “ Quebec.....	..	2		
“ “ “ Nova Scotia.....	..	7		
“ “ “ New Brunswick....	..	1	115	186
<i>(b) Professional Certificates</i>				
1st Class professional certificates.....	14	..		
2nd “ “ “.....	47	..		
3rd “ “ “.....	21	..	82	82
<i>(c) *Professional Certificates</i>				
	52	..	52	52
II. Non-professional certificates.				
1st Class to N.W.T. candidates.....	10	..		
2nd “ “ “.....	49	..		
3rd “ “ “.....	33	..	92	
1st Class, passed equivalent examinations....	..	18		
2nd “ “ “ “.....	..	38	56	148
III. Certificates to student at law.....				
	..	1	1	1
Totals.....	317	217	534	534

Note.—Interim certificates are granted to teachers who complete a course of training at the Regina Normal School or who present approved professional certificates from the Eastern Provinces or elsewhere.

Professional certificates are granted to teachers who have taken Normal training and who have taught successfully in the Territories for at least one year on their interim certificates.

*Including temporary certificates to substitutes for teachers who were ill or who were required to attend Normal School.

12.—EXAMINATIONS.

Table I—Public School Leaving Examination.

No. of candidates who wrote in 1901.....	274
“ “ who passed in 1901.....	139
“ “ who wrote in 1902.....	269
“ “ who passed in 1902.....	158

Table II (a)—Teachers Non-Professional Examinations.

Where held	1901 No. of Candidates			1902 No. of Candidates		
	1st	2nd	3rd	1st	2nd	3rd
Regina.....	6	8	6	5	18	4
“ (For law matriculation)..	..	1	..	..	2	..
Moose Jaw.....	1	5	5	..	5	9
Medicine Hat.....	..	2	4	..	..	..
Maple Creek.....	..	..	..	..	1	3
Calgary.....	..	10	4	..	3	6
“ (For law matriculation)..	..	2	..	..	1	..
Lethbridge.....	1	1	5	..	4	3
Lacombe.....	..	1	2	..	..	..
Red Deer.....	..	..	..	..	1	8
Strathcona.....	2	11	17	8	12	9
Edmonton.....	..	..	..	3	8	14
Prince Albert.....	..	5	3	1	3	2
Saskatoon.....	..	2	2	..	..	..
Battleford.....	..	..	1	..	..	1
Oxbow.....	2	..	4	..	2	6
Indian Head.....	..	6	9	..	7	7
Moosomin.....	..	11	7	..	6	13
Yorkton.....	..	1	8	..	..	..
Totals.....	12	66	77	17	73	85
Totals.....			155			175

Table II (b)—Teachers' Non-Professional Examination.

1901						1902					
Examined			Passed			Examined			Passed		
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
12	65	77	10	50	45	17	73	85	11	51*	52†
Totals..154			.....105			.....175			.....114		

*Includes two candidates who obtained 2nd class standing on results of 1st class examination.

†Includes nine candidates who obtained 3rd class standing on results of 2nd class examination.

Note.—Of the candidates who passed in 1902 one first class, three second class and nineteen third class candidates were under age.

Table III—Teachers' Professional Examination.

1901						1902					
Examined			Passed			Examined			Passed		
1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
30	76	20	29	69	17	28	78	20	22	53	18
Totals....126			.....115			.....126			.....93		

13.—INSTITUTES and Conventions.

The following is a list of the Teachers' Institutes and Conventions held in the Territories during 1902.

Name of Teachers' Association	Place of meeting	When held	Teachers in attendance
North Eastern Assiniboia	Yorkton	June 20 and 21.	19
North Eastern Assiniboia	Yorkton	Sept. 18 and 19	27
Eastern Assiniboia	Moosomin	June 16 and 17.	40
Eastern Assiniboia	Moosomin	Sept. 18 and 19	41
South Eastern Assiniboia	Carnduff	May 27 and 28.	28
Central Assiniboia	Indian Head	May 30 and 31.	36
Central Assiniboia	Indian Head	Sept 26 and 27.	40
Saskatchewan	Prince Albert	May 23	28
Central Alberta	Calgary	June 13 and 14.	30
Red Deer	Red Deer	June 9	31
Edmonton District	Strathcona	Oct. 27 and 28 .	98
Total attendance			409

14.—NORMAL Schools.

Held at Regina for training of 1st and 2nd class teachers.				Held at Regina and other points for training 3rd class teachers.	
No. of students attending. Class of certificate.				No. of students attending.	
Year	1st	2nd	Total		Totals
1893	18	35	53	9	62
1894	5	22	27	37	64
1895	9	13	22	18	40
1896	7	16	23	15	38
1897	12	37	49	38	87
1898	23	36	59	35	94
1899	18	58	76	25	101
1900	18	67	85	10	95
1901	25	73	98	18	116
1902	20	72	92	19	111
Totals	155	429	584	224	808
Trained at Normal sessions held previous to 1893					55
Total					863

15.—INSPECTION OF SCHOOLS.

Inspector.	Jurisdiction.	No. of Districts jurisdiction.	No. of* Schools in operation	No. of* Schools visited once.	No. of* Schools visited twice.	Total* No. of visits.	Distance travelled.		Total
							By rail.	By road.	
John Hewgill.....	Assiniboia (East) and South-east	163	142	132	9	141	170	2,330	2,500
Wm. Rothwell.....	Assiniboia (Central) and Saskatchewan.....	144	128	112	35	147	1,115	2,137	3,251
T. E. Perrett.....	Unorganised.....	2							
	Assiniboia (East) and North-east.....	132	135	120	17	137	1,534	2,662	4,196
	Unorganised.....	2							
D. P. McColl.....	Alberta (South) and Assiniboia (West)...	159	165	120	..	120	1,846	1,828	3,674
	Unorganised.....	1			..				
A. M. Fenwick.....	Assiniboia (Central)...	67	68	51	..	51	731	519	1,250
G. J. Bryan.....	Alberta (North).....	168	145	122	65	187	551	2,280	2,831
		838	783	657	126	783	5,947	11,756	17,703

*Every room in charge of a teacher is classed as a school in these columns.

16—SUMMARY of School Statistics 1886—1902.

Year	Schools in operation	Pupils enrolled	Teachers employed	Total grants paid to schools
1886	76	2,553	84	\$ 8,908 72
1887	111	3,144	125	36,897 47
1888	131	3,453	150	44,547 06
1889	164	4,574	183	56,984 63
1890	195	5,389	224	85,002 55
1891	213	5,652	248	129,042 01
1892	249	6,170	295	121,056 94
1893	262	8,214	307	106,576 59
1894	300	10,721	353	113,999 85
1895	341	11,972	401	112,182 90
1896	366	12,796	433	126,218 21
1897	394	14,576	457	121,457 18
1898	426	16,754	483	133,642 79
1899	454	18,801	545	142,455 89
1900	492	20,343	592	168,322 03
1901	564	23,837	682	162,215 07
1902	640	27,441	783	155,558 41

APPENDIX B.

EDUCATION OF DEAF MUTES.

Principal McDermid's Report.

INSTITUTION FOR THE DEAF AND DUMB.

WINNIPEG, March 5, 1903.

F. W. G. HAULTAIN, Esq., M.L.A.,

*Commissioner of Education.**Regina, Assa.*

SIR,—In presenting for your information a report upon the progress of the pupils from the North-West Territories, I have taken the liberty of reviewing the whole work of the institution and including some of the details furnished in my Annual Report to the Manitoba Government.

I am pleased to inform you that the pupils from the North-West Territories have all made substantial progress in all departments, and we have every reason to be well satisfied with the results.

I have the honour to be, Sir

Your obedient servant,

D. W. McDERMID,

Principal.

REPORT.

Pupils in Residence December 31st, 1902.

	Male	Female	Total
From Manitoba.....	26	18	44
“ British Columbia.....	4	7	11
“ North-West Territories.....	10	3	13
Totals.....	40	28	68

New pupils received at beginning of session in 1902.

	Male	Female	Total
From Manitoba.....	4	5	9
“ British Columbia.....	1	0	1
“ North-West Territories.....	1	1	2
Totals.....	6	6	12

The School.

The classes experienced no interruption during the whole year until the outbreak of scarlet fever in the early part of December. Previous to that we could not have been better satisfied with the attendance and

with the interest manifested by the children in their studies. The examinations, which were held in January and June, gave evidence of material and steady progress on the part of the pupils. The system of instruction is practically the same as reported previously. There is no desire nor necessity to suggest any radical change in our methods, but naturally we would like to improve and make of more value and use those already adopted. It requires a great deal of patience and aptitude for this peculiar work because we have to deal with minds that have their best avenue of gaining knowledge closed, viz., the hearing. We have therefore to deal almost exclusively through the medium of the sight, and for this reason we have to use what appeals to the eye in arousing mental activity. The use of objects and pictures are invaluable in awakening a dormant mind to an understanding of material things. The mind of the deaf, when in ignorance, does not know the meaning or value of words because to him they represent nothing, and the moment he enters school the only successful way that we can awaken that mind is to use objects and pictures as the representative of words, or, more properly speaking, the words are to the child a picture representing an object. A deaf child knows and understands the use of an object probably as well as the hearing child but, unlike the hearing child, he knows nothing that will stand for it, consequently a word has meaning to the deaf child only when he knows it stands for the picture of an object or the object itself. It is almost impossible, therefore, to get along without pictures and objects. Toys are most useful and can be made to form the basis of interesting language sentences. We cannot procure, however, a toy for every object so we are obliged to resort to the use of pictures which we might say are as necessary to the education of the deaf as the use of words and sentences. This idea is recommended among all teachers of the deaf as being essentially important and up to the present time no method of producing pictures that are especially adapted for the deaf has been evolved. Pictures that are made for speaking and hearing children can of course be used with good results in teaching the deaf, but they do not conform with the ideal method and they lack in many respects in meeting all the demands of teaching various forms of expression. The only way, therefore, that we may expect to get the best results is to make our own pictures—pictures that will suit the words and forms of language that we decide to teach, and not have to be put in the position of adapting our language to meet the pictures. We have in the past done this, but we are limited as to the number because we had no method of producing them. We have, since the beginning of this term, been introducing the process of photo engraving and zinc etching, and up to the present time we feel that Mr. Wilkie has mastered the various details of this interesting process and he will be able to turn out as many pictures as we require for our school work. There can be no more useful occupation to a deaf person than that of etcher, photographer or engraver, and if we can introduce any form of occupation that is going to be of direct benefit to the pupils of the school as a manual training and at the same time a most valuable adjunct to our methods of instruction, there ought to be no doubt as to the wisdom of introducing this trade if the cost is within reason.

Closing Exercises.

For the first time in the history of the school we had formal exercises at the end of last session. On this occasion four of our older pupils

graduated. Having passed through the full course of instruction they were entitled to receive at the hands of the school a diploma recognising and certifying to their honourable record while pupils of the school. Invitations were sent out for these exercises and a large number of people attended and manifested a great interest. The entertainment consisted of an exposition of the methods of instructing the deaf, and this included of course what is known as the manual method, as well as the method of teaching the deaf to speak. The entertainment was also interspersed with recitations in the sign language and the rendering of essays by the graduates. At the close of these numbers, His Honour the Lieutenant Governor, who was present, was asked to present the diplomas. Addressing the graduates, he said, "I assure you that your invitation requesting my attendance at this closing exercise gave me very great pleasure indeed. There is not one here but is interested in the education of the young, especially of those who, unlike their more favoured mates, are deprived of the power of hearing and of speech. I deem it a privilege to offer my congratulations upon your efforts. It is a grand thing to know that you have made possible for each of these children so handicapped in the race of life a career of usefulness, of prosperity, and of blessing. I wish you every success, increase in usefulness, increase in attendance at your school, and increase in diplomas given." After this speech His Honour presented each young lady with her diploma, addressing in each case well chosen words of felicitation. These exercises were, we believe, of an interesting character to the general public, and it is my intention hereafter, when pupils are going to graduate, to have a public closing similar to the one last June.

Health.

The health of our children, as well as that of the staff, has been excellent during the greater part of the year; in fact during the first eleven months we had scarcely any sickness at all, and the pupils were prompt and regular in their attendance at school. By some unfortunate circumstance, however, scarlet fever was brought into our school and on the 6th December one pupil was taken to the isolated ward with a most pronounced case of scarlet fever. The next day he was followed by another pupil, and since that time four others have been placed in quarantine, suffering with the same disease, the last being sent on December 30th. The disease is very mild and in no case has there been the least cause for anxiety about the result, and while these children are still in the hospital and have to remain there for some time to come they are in no sense experiencing any discomfort except from the restraint that is placed upon them. They are all able to be up and dressed and to participate in the games and enjoy the toys they received at Christmas.

The cause of the disease is not at all certain and it would be doing injustice to express suspicions unless we had more ground to establish them than we have at present. Scarlet fever did exist in the home of one of the parents previous to infection here, but I have been assured that every precaution was taken both in the matter of fumigation and in retaining the son at home two months after the disease had subsided. The precaution and care taken by this parent should relieve him of blame, even though it is possible that the disease was contracted through his little boy.

It is a difficult matter to prevent the spread of scarlet fever, and no

matter what method is taken to do so it is well known that failure is likely to result. The City Health Department has been cognisant of the situation and we have acted upon the advice and suggestion of the Health Inspector, as well as the instructions of Dr. Benson, our physician, and have used the most up-to-date methods of disinfection. We feel quite assured that we have prevented it becoming generally epidemic, although as to that we cannot be absolutely certain, because it is a difficult question to properly fumigate the whole building in a thorough manner while it is occupied by the pupils. Every dormitory where the fever has appeared has been closed and disinfected with formalin before being occupied again by our children. This, Dr. Douglas, the city health inspector, said was all that could be done at the present time and he has expressed himself as satisfied that we have been comparatively fortunate in view of the fact that such a small percentage has been sent to the hospital. He has given the following certificate, which is gratifying under all the circumstances to present: "To whom it may concern. This is to certify that I have examined the system of isolation of the scarlet fever cases in the deaf and dumb institution and that in my opinion the isolation is of the best and that all possible steps are being taken to prevent the spread of the disease. (Signed) A. J. Douglas, M.D." The full advantage of having an isolated ward has never been fully appreciated before. Our isolation is as complete as if they were sent to the general hospital and we cannot very well be in danger of further infection, at least from those who are now in quarantine.

The sick are under the care of Mrs. Todd, the little boys' nurse, who is faithful to her duties and doing everything for the children under the direction of Dr. Benson.

The health of the rest of the family is on the whole excellent and the only anxiety that we feel for them is the possible chance of their taking the scarlet fever.

Entertainment for the Pupils.

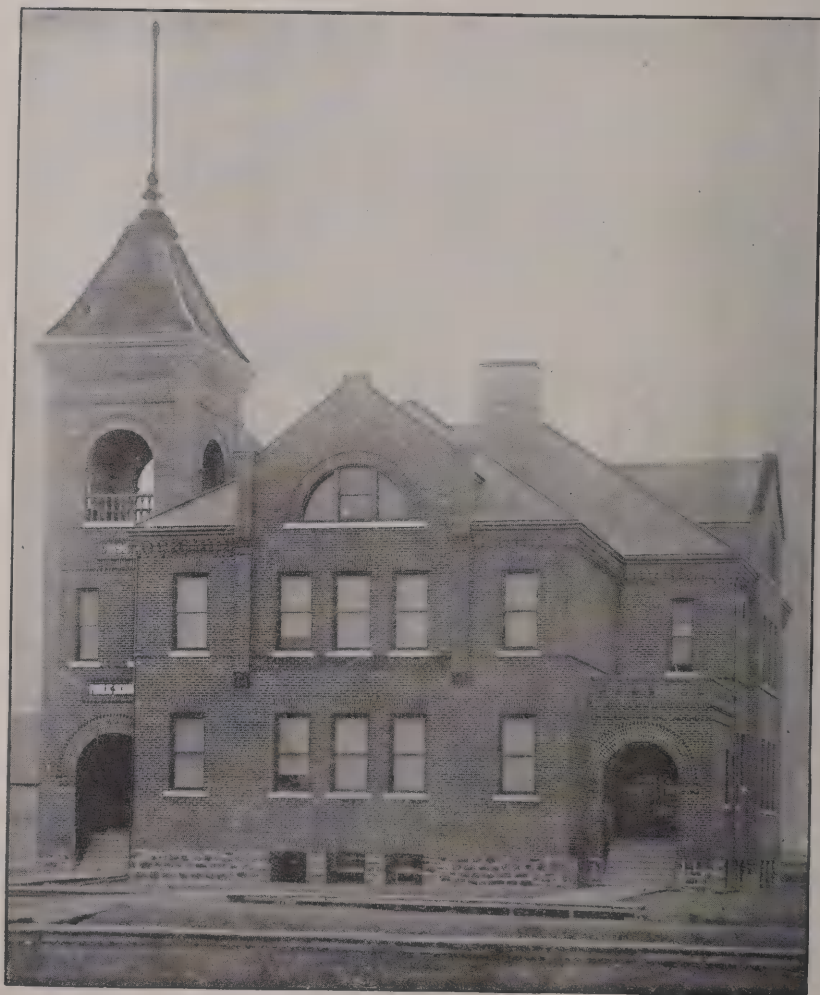
Through the generosity of the parents and the friends of the institution I have been able to procure a stereopticon with a moving picture apparatus attached. This has been the means of furnishing very pleasant entertainments to the pupils. Moving pictures are interesting to the hearing as well as to the deaf, but as all enjoyment to the senses comes to the eye anything in this line is more appreciated by those who are unable to hear. We had illustrated lectures from Mr. J. S. Ewart, K.C., and the Rev. Mr. J. B. Silcox. Mr. Ewart's lecture was on Jerusalem, and contained a great deal of very useful information and knowledge of Bible lands.

Dressmaking Department.

The introduction of dressmaking, which was referred to in my last report, is proving more satisfactory in every respect. Miss Hall, who is head of this department, is exceptionally well suited for the work that she has to do. She was a stranger to the language of the deaf when she first came but her aptitude in picking up the signs soon made her quite at home with the children. She is expert in her work and possesses the gift of imparting her knowledge to others. The pupils under her instruction have made remarkable progress, and I feel that in this direction at least we are doing our whole duty to these girls. If they make good

MODELLING. 1902





PUBLIC AND NORMAL SCHOOL, REGINA, ASSA.

use of their time while at dressmaking I have no doubt as to their ability to earn a living after they leave the institution.

The following is a list of the work done during the year, which will give you some idea of what has been accomplished:

Overcoats, boys.....	8	Wrappers	2
Coats, boys.. ..	15	Caps.....	2
Pants, boys.....	16	Aprons.....	17
Coats, girls	15	Nightgowns.....	3
Dresses.....	30	Drawers.....	3
Blouses.....	84	Shirts	3
Skirts.....	24	Bathing suit.....	1

Of course this does not represent everything that has been done, but hereafter I shall be able to present a full record of everything that is turned out of this department.

APPENDIX C.

MACDONALD MANUAL TRAINING SCHOOLS.

The Director's Report.

REGINA, April 10th, 1903.

F. W. G. HAULTAIN, Esq., M.L.A.,
Commissioner of Education.

SIR,—I have the honour to submit the following report on manual training.

During the past year manual training in woodwork has been carried on in the city of Calgary and in the adjacent rural district of Nose Creek; and in wood work, cardboard work and modelling in the public schools and Territorial Normal School at Regina.

It may be well to give here a brief outline of the three branches of work mentioned. A course in educational wood work usually consists in making a series of small, and to the child, useful objects in which the various operations that may be performed by the commoner wood working tools are carefully graded in order of difficulty. A working drawing of each object is made by the pupil before he begins the construction; this enables him to present the facts of the object. In this he learns how to express his thought by drawing and how to translate a drawing into work. He also learns how to use tools and to keep them in order, something of the nature of wood, some simple construction, and gets some valuable hand and eye training. It brings the child face to face with difficulties that tend to develop perseverance, resourcefulness and self reliance. This particular work is best suited to pupils in Standards IV, V and VI, all of whom should get from two to three hours instruction in it per week. If the work is taken in Standard III it must be simplified. If taken in Standards VI, VII and VIII by those who have been previously through a course it may be used in constructing apparatus and making models for mechanics, physics, etc.

What is known as cardboard work consists of a similarly graded course of models in Bristol board, pulp board or other similar material, generally including some preliminary work in paper. In making the patterns on the material a good deal of practice is obtained in drawing, in simple arithmetic and in elementary practical geometry. It requires much thoughtful work and affords good training in neatness and accuracy. Owing to the small number of tools that are required, and as no great physical effort is called for in their use, this branch of manual training is especially suitable for Standards II and III, and if made sufficiently simple it may be taken in Standard I. The weekly lesson should be about one hour in length. In illustrating mathematics or other class subjects the work may be used in the highest standards.

Modelling is very suitable work for Standards I and II owing to the ease with which the material may be manipulated, to the fact that

sizes are taken more by proportion than by definite measurement, and to its having more of the element of play in it. From three-quarters of an hour to one and a half hours should be taken at this work each week. The objects modelled are selected from vegetable and animal forms, geometrical type forms, simple designs, maps and many other kinds of objects connected with life or with school work. Most objects are modelled in the solid, but some work is done by building up on a flat ground. Some of the work is done from the actual objects and some from memory. Freehand drawing is intimately connected with modelling and therefore much work is done on the blackboard by the children. Modelling is especially valuable as a training in observation and in developing the senses of touch and form. If modelling is taken in the higher standards it may be made to illustrate geography, nature study, etc., or taken as special art work.

Cardboard work and modelling are eminently suitable for introduction into rural schools; also for use by the class teacher in town schools. No special room is required, the equipment is small and inexpensive and the skill necessary may be easily acquired. Both kinds of work are almost indispensable in teaching drawing, and the modelling may be made very useful in illustrating some of the other subjects on the programme.

In order to do this practical work teachers must have a certain amount of special training. Cardboard work and modelling are so simple that a teacher could acquire enough while attending a Normal class to enable him to commence using either. To become more thoroughly acquainted with them a month's special course should be taken in each. A good deal may be learned by attending a summer school, or by attending Saturday classes where a sufficient number of teachers can be gathered together for the purpose. In order to become qualified to take a class in wood work or to teach it in a rural school, a special course of at least two months should be taken. To become qualified as a special instructor would require four months or more.

To introduce wood work in the larger towns it would be necessary to employ a special instructor who would devote his whole time to teaching it. In other cases one instructor could spend his time between two or three adjacent towns. If a small town is so isolated as not to make this possible the special teacher could spend part of his time in teaching the ordinary work. The ordinary teacher could teach wood work in a rural school and cardboard work and modelling in any school, after receiving a short training.

The tools for cardboard work cost about eighty-five cents per head, and the materials about twenty cents per head per annum. Modelling costs about forty cents per head for tools, etc., and about twenty cents per head for material. In both cases the tools can be used by any number of different classes.

The necessary wood work equipment for a rural school would cost from \$75.00 to \$100.00; that for a town school from \$350.00 to \$400.00. In the town school this equipment might be used by nearly 200 pupils during the week, so that the per capita tax would not be as large as would at first appear. It also lasts many years. The wood and other necessary material costs about fifty cents per head per annum.

The Calgary school, which was opened in temporary premises on March 4th, 1901, removed to its present quarters on March 10th 1902. There being no room available in the schools a building was erected

specially for the work by the school trustees at a cost of about one thousand dollars. The cost of the 20 benches and sets of wood working tools with which it is equipped was met by the Macdonald Manual Training Fund. The classes are composed of the boys of Standards II (Senior), III, IV, V and the High School. The girls of Standard V and the High School also attended for some time. The average attendance has been one hundred and seventy per week. A course of 40 lessons given to teachers of the town was well attended and much appreciated. Pupils, parents, trustees and teachers are all more than satisfied with the success of the school. While the self-sacrificing enthusiasm of Mr. Snell, who is in charge of the work in Calgary, has no doubt much to do with this, the work itself is of such a nature as to call for it. The following resolution passed recently by the school trustees shows their attitude towards it: "Resolved that after almost two years' attendance of our pupils at manual training classes which has fully confirmed our opinion of the very great benefit to be derived from such training, we strongly recommend that the subject (provisional course) be placed on the school programme of studies, and that the curriculum be so modified as to allow ample time for the teaching of it."

The Regina school was opened on November 4th, 1901, for the students of the Territorial Normal School, but was not used much for others until the new year. It is in very cramped quarters in the basement of the public school. In addition to the nineteen bench wood work equipment, it is supplied with tools and appliances for cardboard work and modelling. The average number of classes held per week has been ten in wood work, three in cardboard work, and two in modelling, with an average weekly attendance of 255 pupils. Wood work was taken by the High School pupils and Standards V and VI of the Public School. Standards III and II took modelling and cardboard work. In all cases both the boys and the girls took the work.

The following resolution has been passed by the Regina trustees: "Resolved that the manual training classes in wood work, cardboard work and modelling conducted in the school during the past year, having proved of so much interest and benefit to the pupils of all grades, we recommend that this work be included as an optional course in the Course of Studies, and suggest that the Territorial Government pay a special grant to help meet the additional expense involved in providing for it."

While the Normal School was in session all the students (92) took 26 hours at wood work. Cardboard work and modelling were taken on Saturdays by all for whom there was accommodation—22 hours being spent at each. The accompanying illustrations of models made by this class give an idea of the nature of the work. One of these students has since commenced teaching modelling in his own school.

The work in the ungraded school at Nose Creek began on April 1st, 1902. A small shed attached to the school was put in order at a cost of \$62.00 and three double benches with the necessary tools, costing \$75.00, installed. The average attendance of this school is 21 and 18 of these, between the ages of 8 and 16, in Standards II, III and IV, take Manual Training wood work. They take it, six at a time, for one hour and a half twice a week. The teacher, Mr. J. Miller, became acquainted with the work by attending Mr. Snell's Saturday classes in Calgary, and by subsequently spending part of his summer holidays in studying it. The trustees are delighted with the work and are paying Mr. Miller \$50.00 a

year extra on account of his ability to teach it. That they are anxious not to have to discontinue the work is shown by the following extracts from an excellent report forwarded by the secretary treasurer: "The introduction of manual training lessons into the district school has given general satisfaction both to pupils and parents, since its introduction about a year ago." "The lessons are manifestly very popular with the pupils, do not unduly interfere with the ordinary subjects of instruction, and up to the present time have been found successful in every way." "Inasmuch as comparatively few teachers are at present trained in this department of instruction, it may be difficult to find a suitable successor (to the present teacher) so far as these lessons are concerned, and consequently this school board ventures to suggest the advisability of the Education Department of the Territories taking such measures as may be deemed necessary to encourage the training of present or future teachers in these branches."

A summer school was held at Regina from July 2nd to July 31st and was attended by 11 teachers. Three hours each day were devoted to wood work, one and a half to modelling and one hour to cardboard work; the time in each case including the necessary drawing and theoretical work, and much work was done in the time. One of these teachers is making arrangements to teach cardboard work to his pupils.

During May and June I addressed public meetings in connection with Teachers Institutes held at Prince Albert, Indian Head, Edmonton, Red Deer and Moosomin and exhibited specimens of work and drawings and photographs illustrating the work. Much interest was shown by teachers and the public and a general desire expressed to see the work introduced.

In view of the expiration in June, 1903, of the support given by Sir Wm. Macdonald to Manual Training Schools throughout the Dominion, through the fund administered by Professor Robertson, most of the provinces have made definite arrangements for carrying the work on.

In Nova Scotia an act was passed in 1900 which provided for the payment of a grant of fifteen cents per head per lesson with a maximum of \$600 to each manual training school. There are now eighteen town schools in operation and seven others have decided to open. Cardboard work is taught in several rural schools. In the Normal School two and a half hours per week are spent at wood work. A special six months' course is held at Truro for training special instructors for all the maritime provinces. A supervisor of manual training is employed by the Government to direct the work in mechanic science and domestic science.

In New Brunswick an act of 1901 provides for a grant of \$50 to any class teacher giving instruction in this work, and \$200 to every special instructor giving his whole time to it, in addition to paying half the cost of equipment of the room. Manual training is at present taught in three town schools and three rural schools, while five other town schools are about to begin. All the teachers-in-training at the Provincial Normal School spend two hours weekly at either wood work or cardboard work.

In Ontario there is a fixed grant of \$350.00 per school, plus a percentage of the teacher's salary if it exceeds a certain sum. The cost of equipment is also paid for during the first five years. Manual training is now included in the three Normal Schools and in the Normal College, and schools are in operation in many of the towns. The Supervisor

of Manual Training has been appointed Inspector of Technical Education for the Province.

Hoping that your government will be able to encourage this phase of educational work in these Territories.

I am, Sir,

Yours obediently,

LINDLEY H. BENNETT,

*Director of Macdonald Manual Training
Schools, N.W.T.*

APPENDIX D.

ORGANISATION, MAINTENANCE AND CONSOLIDATION OF SCHOOLS

Formation of School Districts.

Under the provisions of The School Ordinance new districts are formed when a majority vote of the resident ratepayers is in favour of their organisation. The conditions necessary for the formation of new districts are as follows: (1) The area petitioned for must not exceed five miles in length or breadth; (2) It must contain at least twelve children between the ages of 5 and 16 years inclusive, and four persons actually resident therein who own or occupy land that would be liable for assessment upon the establishment of the district.

Maintenance of School Districts.

The cost of maintaining schools is met by local taxation and legislative grants. The amount of revenue to be derived from taxation is determined by the board of trustees of each district. The rate of taxation varies according to the conditions of the district and the length of time its school is kept open. The legislative grants are fixed by The School Grants Ordinance, the chief provisions of which are as follows:

1. In aid of all schools—

1. In aid of schools organised and conducted under the provisions of The School Ordinance there shall be paid out of any legislative appropriation made for that purpose:

1. To rural districts an amount to be calculated as follows:

- (a) To each district containing 6,400 acres or less of assessable land as shown by the last revised assessment roll of the district \$1.20 per day for each day school is kept open; to each district containing less than 6,400 acres as aforesaid one cent more per day for each 160 acres or fractional part thereof less than 6,400 acres; and to each district containing more than 6,400 acres as aforesaid one cent less per day for each additional 160 acres or fractional part thereof;
- (b) To each district whose school is kept open more than 160 days in the year 40 cents per day for each additional day not exceeding 50;
- (c) To each district engaging a teacher who holds a first class professional certificate under the regulations of the department 10 cents per day for each day such teacher is actually employed in the school;
- (d) To each district whose school maintains a percentage of attendance as set forth in the following schedule the sum set opposite thereto for each day school is kept open:

Schedule.

A percentage of from	40	to	50	inclusive..	5	cents.
"	"	51	"	60	"	..10 "
"	"	61	"	70	"	..15 "
"	"	71	"	80	"	..20 "
"	"	81	"	100	"	..25 "

2. To village and town districts an amount to be calculated as follows :

- (a) To each district the sum of 90 cents per day for each day its school is kept open ;
- (b) To each district engaging a teacher who holds a first class professional certificate under the regulations of the department 10 cents per day for each day such teacher is actually employed in the school ;
- (c) To each district whose school maintains a percentage of attendance as set forth in the following schedule the sum set opposite thereto for each day school is kept open :

Schedule.

A percentage of from	50	to	60	inclusive..	5	cents.
"	"	61	to	70	"	..10 "
"	"	71	to	80	"	..15 "
"	"	81	to	90	"	..20 "
"	"	91	to	100	"	..25 "

3. To each district whose school attains a minimum grading on its efficiency in respect to grounds, buildings, equipment, government and progress a sum not exceeding fifteen cents per day to be paid in proportion to such grading for each day school is kept open ; and such grading shall be based upon the inspector's report or reports as prescribed by the regulations of the department :

4. To each town or village district maintaining one or more rooms exclusively for pupils in standards above the fifth the sum of \$75 per term provided the daily average attendance of pupils in such room or rooms for any such term classified in accordance with the regulations of the department is at least twenty :

Provided that no grant shall be paid to any district under the provisions of this section unless an average attendance of six is maintained in its school for the term immediately preceding the time when the payment of the grant may be due :

Provided further that the grant payable to any rural district under subsection (a) of clause 1 of this section shall not be less than 90 cents per day for each day the school is kept open :

Provided further that any and every amount payable to any district under this section shall not unless otherwise provided be payable for more than 210 days in any calendar year :

Provided further that in any district where more than one teacher is employed each room shall rank as a district under the provisions of clauses 1, 2 and 3 of this section when the average attendance of the whole school shall at least equal twenty pupils to each teacher employed :

Provided further that if the sum of the grants payable to any district under clauses 1 or 2 of this section shall exceed 70 per cent. of the salary actually earned by the teacher or teachers employed in the

district during the year the amount of the grant payable at the end of the second term of the year shall be reduced so that the total amount of the grant paid shall equal the said 70 per cent :

Provided further that payments may be made in respect of the amounts earned under clause 1 or clause 2 of this section at the end of the school terms ending on the thirtieth day of June and the thirty-first day of December in each year on receipt of the returns hereinafter provided and on receipt of the treasurer's bond and teacher's agreement as provided in The School Ordinance :

Provided further that in case the school of any district is open only during a portion of the year payment may be made to such district in respect of the amounts earned under clause 1 or clause 2 of this section as soon as the school closes for the year on receipt of the returns, bonds and agreement mentioned in the next preceding proviso :

Provided further that when the return of the treasurer of any district as hereinafter provided shows that the district is indebted to any teacher or teachers the grant payable to such district under clause 1 or clause 2 of this section or such portion of it to the amount of such indebtedness shall be paid proportionately to such teacher or teachers :

Provided further that the grant earned by any district under clause 4 of this section shall be paid to such district at the end of the school year and in case the school of any district is not inspected during the year the district shall be paid for such year such grant as it may be entitled to upon the basis of the grading its school attains on the first inspection in the following year.

2. The Lieutenant Governor in Council may order the payment of a special grant to any school whether organised according to law or not.

3. For the purpose of estimating the grant which may be earned by any school on account of the attendance of pupils the average attendance for any calendar month during which the school is kept open shall be calculated by dividing the aggregate days attendance for such month by the number of days school is kept open during such month ; the percentage of attendance for any month school is kept open shall be calculated by dividing the average attendance for such month by the number of pupils in actual attendance during such month ; and the percentage of attendance for any term shall be calculated by dividing the sum of the monthly percentages of attendance by the number of such monthly percentages of attendance.

4. The board of every district receiving a grant under clause 3 of section 1 hereof shall expend one half of the amount of such grant received in each and every year on the purchase of books for a school library and such books shall be selected from a list authorised and furnished by the department.

Consolidation of Schools.

The following are the provisions of The School Ordinance (Sections 165 to 166) respecting the consolidation of schools and the transportation of pupils :

165. Upon a petition hereinafter provided for being transmitted to the commissioner he may empower the board of any rural district to

enter into an agreement with any other board or boards for the education of the children of its district upon such terms as may be mutually agreed upon and approved by him and the board entering into any such agreement shall have full power and authority to make the necessary levy and assessment for the purpose of carrying out the terms of the agreement and for providing for the conveyance of children to and from school under the provisions of The School Assessment Ordinance :

Provided that any such agreement may be terminated by any board a party thereto by giving notice on or before the first day of October in any year and upon such notice being given the agreement shall cease and determine on the last day of the month of December following.

(2) The petition for permission to enter into such agreement may be in form prescribed by the commissioner and shall be signed by at least two-thirds of such resident ratepayers of the district as are the parents or guardians of children between the ages of five and sixteen years inclusive.

(3) The statements contained in the petition shall be verified by the affidavit of two of the subscribing petitioners and the signatures of the ratepayers signing the petition shall be verified by the affidavit of a subscribing witness thereto.

166. The commissioner may subject to the approval of the Lieutenant Governor in Council make such regulations as are deemed necessary and expedient for the proper conveyance of children as hereinbefore provided and for the keeping of proper records of the number of children conveyed, the distance travelled, the cost of conveyance and such other information as may be desired.

In all cases where two or more districts have entered into an agreement for consolidation The School Grants Ordinance (Section 10) provides that there shall be paid at the end of each school term from and out of moneys appropriated by the Legislative Assembly for school purposes the following amounts—

1. To every district providing the means of conveyance for children from one district to another the sum of 60 cents per diem for each day upon which such conveyance is provided in accordance with the regulations of the department :

2. To every district agreeing as aforesaid to educate the children of one or more districts the sum of 4 cents per diem for each pupil in average daily attendance who has been conveyed to and from the school house in such district or educated therein in accordance with the regulations of the department :

Provided that the total number of days in each year for which such grants may become payable shall not exceed 210 :

Provided further that in case the number of children conveyed from one district to another in accordance with the terms of the agreement falls below an average of six for any term the grant payable under subclause 1 of section 10 hereof shall be paid in the proportion that the average number of children conveyed for the term bears to six ;

Provided further that the total amount of the grant which shall be payable under subclause 2 of section 10 hereof shall not exceed for any term the amount of 40 cents per diem unless it is satisfactorily shown that the presence of such children necessitated the employment of one or more additional teachers in which case the total amount of the grant thus earned shall be paid.

APPENDIX E.

TEACHERS' ASSOCIATIONS.

THE following is a list of the Teachers' Associations which have been organised in the Territories.

Name.	President.	Secretary.
North West	Mr. D. S. MacKenzie, Strathcona	Mr. A. H. Ball, B.A. Moose Jaw
North Eastern Assiniboia . . .	Mr. J. McCarron, Yorkton	Mr. T. R. Welwood, Saltcoats
South Eastern Assiniboia . . .	Mr. J. F. Hutchinsón, Oxbow	Mr. A. E. Bence, Carnduff
Eastern Assiniboia	Mr. A. J. Mather, B.A., Whitewood	Miss A. E. Callaghan, Whitewood
Central Assiniboia	Mr. W. E. Stevenson, B.A., Balcarres	Mr. Wm. Harvey, Wolseley
Regina	Mr. E. B. Hutcherson, M.A., Regina	Mr. J. F. Bryant, Re- gina
Saskatchewan	Mr. A. C. Howard, Prince Albert	Miss Alice Sharman, Prince Albert
Moose Jaw		Mr. J. A. Munroe, Moose Jaw
Central Alberta	Mr. D. Campbell, Banff	Miss H. J. Jarrett, Calgary
Red Deer		*Mr. A. T. Stephen- son, Red Deer
Edmonton District	Mr. D. C. McEachern, Strathcona	Miss B. M. Battrick Edmonton

*Pro tem

TERRITORIAL TEACHERS' ASSOCIATION.

Circular of the Committee on Art.—Revised 1902.

At the annual meeting of the association in 1900 a committee was formed to further the artistic adornment of our schools and to promote the study of art therein as a means of culture. It was thought that this committee might suggest lines of work to the representatives at the annual meeting of the association, supply the local associations with such helpful information regarding the adornment of schools as may be procurable and with the addresses of dealers in pictures and casts, while throughout the year its members would serve as a bureau of information on all matters connected with this side of school work.

That the aesthetic claims attention in school work need not be discussed. Of the helpfulness of beautiful environment Plato has written. Of its need every thoughtful teacher in our country is persuaded. It is to be hoped that this committee will assist in a work that educators have recognised as wise and necessary.

One thing seems certain. If our teachers are not a source of inspiration and guidance our children will receive little assistance in forming a love for the beautiful. The struggle for a footing that has till lately been characteristic of the life of our settlers has left distinct materialistic leanings. There is too little attention given to those things that do not mean money. Those "who look after the rights of the ratepayers" are firm in their grasp on the treasurer's purse strings. In many sections the struggle for necessary equipment is not yet over, that for decoration is scarcely dreamed of.

Use of Decorations.

The best answer to the question of the use of decorations runs along these lines:

1. They add to the attractiveness and cheerfulness of the place in which the children spend the greater part of their waking hours.
2. They have also collateral uses in composition, history, nature study and geography.
3. They cultivate a love of beauty and so reinforce moral training.

What the Teacher can do.

The following suggestions are of practical importance:

1. The walls of the schoolroom should not be shiny. Delicate tintings of soft gray greens, or delicate shades of dull blue are best. The colour of the walls and ceiling should harmonise with the wood work; that of the ceiling a very light tint. Hall ways look well in terra cotta tones. Picture moulding, to which the pictures may be hung, adds greatly to the appearance of the room, while it has the advantage that the position of pictures can be changed without defacing the walls. It can be bought at three cents a foot. Moulding should be about one foot from the ceiling on a ten foot wall.

2. Cleanliness must exist before there can be beauty. The dusting and scrubbing, the shaking of curtains and screens, keeping litter of papers off the floor, picking dead leaves from window plants, the covering of unsightly pots with coloured paper, the caring for the blackboards, the

keeping of stoves and pipes free from rust, etc., etc.—all things that tend to tidiness must be observed.

3. The decorations need not be expensive. The coloured border sold by Kindergarten dealers (Selby & Co, Toronto) make an attractive temporary frame for such coloured prints as are issued as supplements to the Christmas numbers of the great illustrated papers. A better, more effective, yet inexpensive frame is made with passepartout paper. The picture is put behind its glass covering with or without a mat. A cardboard backing is pierced with paper fasteners to attach the cord. The gummed passepartout paper (which is about one inch wide) is folded over the edge of the glass to the cardboard backing, thus giving a "frame effect" while it holds the picture in place and excludes dust. Different coloured borders may be purchased. This paper is sold by book dealers at from fifteen to twenty cents a roll of twelve yards.

Such devices as these make a good beginning; neither of them will take the place of the permanent wooden frame. In the choice of a mat and of the frame so much depends on the individual picture that no general direction can be given. Good directions will be found in Burrage and Bailey's "School Sanitation and Decoration" (D. C. Heath & Co., Boston). It is one of the latest and best inexpensive books on the subject.

4. There is a fourth source of help that might have been mentioned earlier, viz., the blackboard. Good stencil decorations may be had cheap. We suggest that teachers attending institutes may exchange. Three objections to stencil decorations are commonly advanced—that many stencils are inartistic, that the ordinary coloured crayons do not give sufficient variety in gradations of tint, and that lazy teachers leave them on the board long after their usefulness has passed. Teachers who are thoughtful, ingenious and energetic need but have these objections pointed out.

List of Pictures.

For the guidance of purchasers we append a list of pictures. It has been carefully prepared from those selected for the Boston Schools by Hopkins and from the suggestive list in Burrage & Bailey's "School Sanitation and Decoration."

Suitable for all grades.

- Sistine Madonna (detail), Raphael.
- Madonna of the Arbor, Dagnan-Bouveret.
- Arrival of the Shepherds, Lerolle.
- Bayard (dog), Paton.
- The Nursery (lambs), Waterlow.
- At the Watering Trough (horses), Dagnan-Bouveret.
- September (trees), Zuber.
- The Watering Trough in the Meadow (cow), Dupre.
- Frightened Bather (mother and child), Demont-Breton.

Suitable for Primary Grades,

- Baby Stuart, Van Dyck.
- Sunshine (child), L. A. Tadema.
- Girl with Cat, Hoecker.
- The Cat Family, Adam.
- A Helping Hand (girl and old man in boat), Renouf.
- Steady (children on beach), Morgan.
- Feeding Her Birds (mother and children), Millet.

Kiss Me (dog and child), Holmes.
 Can't You Talk (dog and child), Holmes.
 Suffer Little Children, Plockhurst.
 Repose in Egypt.
 Charitas (woman and children), Thayner.

Intermediate Grades.

Pharoah's Horses, Herring.
 The Chorister Boys, Mrs. Anderson.
 The Doctor, Fildes.
 The Sheperdess, Le Rolle.
 Princes in the Tower, Millais.
 The Balloon (hayworkers), Dupre.
 Dina or Christ (if a large copy), Long.
 The Soul's Awakening (girl), Sant.
 The Angelus, Millet.
 Spring (trees and water), Corot.
 Holy Family, Murillo.
 Madonna of the Chair, Raphael.
 Tennyson, Longfellow, Bryant, etc.

All these subjects are good. The manner of reproduction whether wood, steel, stone print, half tone, photographic, etc., will mean much.

Addresses of Dealers.—All these may be had in reasonably cheap form from the dealers whose addresses we give below :

The Chicago Art Education Co., 1223 Masonic Temple, Chicago, issue a very helpful list of pictures for school use. They handle casts as well as pictures. Of these Donatello's "Head of Laughing Boy," and "St. John" are excellent. Sixteen inches high; price 75 cents and expressage.

The Prang Publishing Co., 151 Wabash Avenue, Chicago, issue a "dollar edition" of pictures of an excellent size for the school room. Their Canadian agents are The Steinburgher Hendry Co., Toronto, who list goods at the New York price.

J. C. Whitter & Co., 123 5th Avenue, New York, have issued a series of cheap reproductions of famous pictures at 25 cents each—Plate 14x18 Card 20x25. Le Rolle's "Shepherdess" is especially good. Others we have seen of this series are by no means as well executed. This firm publishes photo prints on cards 22x28, post paid 70 cents. Their catalogue is 4 cents. They deal in casts as well.

The Helman-Taylor Art Co., 257 5th Avenue, New York, publish "Harper's Black and White Prints" on 16x23 paper. The price is 35 cents each.

The three great photographic houses of the United States furnish an unlimited choice of pictures. They are: The Soule Photographic Co., 338 Washington Street, Boston; The Berlin Photographic Co., New York; and The Moulton Photographic Co., 50 Bromfield Street, Boston, Mass. The Art Metropole, 149 Yonge Street, Toronto, offer Cabinet Artotypes at 3 cents each. The Perry Pictures Co., Malden, Mass., issue a series of some two thousand subjects at a cent each. Their "5 cent" large pictures are excellent, although rather small for framing. The Canada Drug and Book Co., Regina, carry these in stock.

Geo. P. Brown and Co., Beverly, Mass., also publish reproductions at a cent each. Their large platino and carbon prints are equal to the Perry's. The pictures supplied by these two firms make good subjects for passepartout mounting. The Cosmos Picture Co., 296 Broadway, New York, also issue an excellent line of cheap reproductions.

The Woman's Home Companion, Springfield, Ohio, is making a temporary offer of thirteen pictures. These are 20x25 (including margin). Three are given for 29 cents. Those we have seen are good subjects for a small school room.

In this connection we may call attention to the series issued by The Ladies' Home Journal (Curtis' Publishing Co., Philadelphia, Penn.) at one dollar, untinted; tinted, two dollars.

The Study of Pictures.

A picture is the expression of a thought. As a novel, or a play, or a piece of music, conforms to the laws of expression so must a picture. In this light we study it. For example, the details must be consistent with the general purpose. When each detail enforces our interpretation and the general thought then the picture is imbued with a certain meaning.

In addition to the interest in the thought or story we derive pleasure from the composition. The flow of lines, the harmony of colours, the placing of masses and the gradations of light and shade are all used to give beauty. These also must bear out, re-enforce, and be subordinate to the central thought. Unity both in thought and in treatment is necessary.

With thoughtful study will come appreciation. The more simple points in composition may be taken in connection with the study of rhetoric.

Excellent books have been published lately that will throw light on the subject for those who care to pursue it. "How to judge of a picture" (Eaton and Mains, New York); "Art for Art's Sake," Van Dyck (Scribner's); "How to Enjoy Pictures," Emery (Prang); "Art and the Formation of Taste," Lucy Crane (The McMillan Co.); Composition, Dow (Baker and Taylor Co., New York).

Hints in Choosing Pictures.

In choosing pictures we offer the following suggestions:

1. Have variety of subjects in your room—landscape, animals, buildings, portraits, etc.

2. Primary children delight in pictures of animals and of children, but these need not be confined to the primary grades.

3. The little known should find its place in pictures, *e.g.*, country children should have some city scenes and architecture, while town children should be reminded of the life of the farm and of the country. Our prairie folk welcome views of the sea, of woods and of mountains.

4. The space to be filled frequently determines the size of the picture purchased. Some subjects lose much of their interest when reproduced on a small scale.

5. Coloured pictures should be selected with caution—the cheap oil "made-while-you-wait" kind avoided with decision.

6. The subjects should bring pleasure; *e.g.* Landseer's "The Highland Shepherd's Last Friend" is a beautiful subject, but it is not suitable as a daily companion for a child. "The Dying Gaul," "Ecce Homo," "The Last Judgment," are great, but their place is not in the primary school.

Your committee submit the foregoing trusting it will further a phase of education that is recognised as worthy of serious attention.

We feel that, when teachers see that this work is feasible—that it is not necessarily expensive, and that it may be a distinct aid in discipline and in other lines of school work,—more attention will be given to it in the future than it has hitherto received.

On behalf of the art committee,

A. M. FENWICK, Regina.

J. R. POLLOCK, Regina.

C. H. LEE, Moosomin.

APPENDIX F.

TEACHERS' READING COURSE.

As teachers who have completed their professional training frequently ask for guidance in their subsequent reading, the Department in 1900 established a Teachers' Reading Course. The regulations governing the course are as follows:

"The Commissioner of Education may prescribe a course of reading for teachers. Teachers may at any time enter upon the course (which shall be optional) by reading one or more of the three books prescribed each year.

"Any teacher who desires a certificate of having read satisfactorily any book prescribed shall write brief essays on topics based upon such book and assigned by the Department of Education. He shall also make a declaration that he has carefully read the book and that the essays written were composed by him. The essays and declaration shall be transmitted to the Department of Education not later than March 1st in each year.

"Any teacher who submits to the Department certificates of having read satisfactorily nine of the books prescribed shall receive a diploma certifying to the completion of one full reading course. Additional diplomas shall be awarded to teachers who complete additional courses of nine books."

The following is a list of the books selected for the course for the past three years:

1900: Teaching the Language Arts, Hinsdale.
Plant Relations, Coulter.

Talks to Teachers on Psychology, James.

1901: The Art of Study, Hinsdale.

Animal Life, Jordon and Kellogg.

The Teaching of Elementary Arithmetic, Smith.

1902: How to Enjoy Pictures, Emery.

Nature Study and the Child, Scott.

The Study of History in Schools, Committee of Seven.

The subjects of the essays based upon the course for 1902 were:

A.

How to enjoy Pictures, Emery.

1. Give an interpretation of the "Landscape and Mill."

2. Give a study of,—

(a) The *light* in "The Holy Family," "The Return to the Farm," and "Study of Cats."

(b) The *lines* in "Ploughing in the Nivernais," "The Spinner," "Curiosity."

(c) The *balance and grouping* in "Punch and Judy at the Convent" and "Primary School in Brittany."

3. Give the guiding principles in the choice of colours for the walls of a school room, of frames for pictures, and of pictures for the walls.

B.

Nature Study and The Child, Scott.

1. Discuss the aims and limitations of nature study.
2. In the study either of a well known plant or animal compare the "Science" method with the "Nature Study" method, and the benefits resulting from each.
3. Either (a) outline, with reasons, the order of a series of topics for the study of *one* of the following : a suitable bird, an insect, or form or water ; or (b) discuss the place of teacher, of books, and of apparatus in Nature Study.

C.

The Study of History in Schools, Committee of Seven.

1. Discuss the characteristic features of historical instruction in Germany. Briefly compare with that given in the French Lycees.
2. "If history is to take and hold its proper place in the school curriculum, it must be in the hands of trained teachers who are thoroughly equipped for the task of bringing out its educational value." Fully discuss the value of this statement.
3. Discuss the best methods of handling any *three* of the following divisions in the general field of history : Ancient History, Mediaeval History, English History, American History and Civil Government.

APPENDIX G.

PROGRAMME OF STUDIES FOR THE SCHOOLS OF THE
NORTH-WEST TERRITORIES.

This Programme is based on a *minimum* requirement for each standard. It is prescribed by the Council of Public Instruction as a guide in classifying pupils. It may be modified to meet the needs of special schools but not without the written consent of an inspector who shall forthwith report to the Council. The work in each standard includes a review of the essentials in previous standards.

It shall be the duty of each teacher to make a time table, based on this programme, and to present it to the inspector, at each visit, for his approval and signature.

READING AND LITERATURE.

Silent reading is used to obtain ideas and thoughts through printed or written words—to comprehend the subject matter as a whole and to grasp the significance of the parts, as well as to discover and appreciate beauties of thought and expression.

Oral reading is used to express these ideas and thoughts so as to be heard, understood and felt. It involves systematic training in the principal elements of expression—quality of voice, pitch, force, time, stress, inflection, emphasis, pause.

Supplementary reading is used to furnish additional reading matter; to provide reading collateral to the studies in nature, geography, history, literature, etc.; to cultivate a taste for good literature. Its use is optional.

Sight reading in silence is used to give power to glean thought quickly and intelligently from the printed page. It is followed by logical statement, in the pupil's own words, of what he has gleaned.

Selections of poetry and prose inculcating reverence, love of country, love of nature and admiration of moral courage are to be committed to memory and recited.

Standard I.

Authorised First Readers. Authorised Supplementary Readers.

Standard II.

Authorised Second Readers. Authorised Supplementary Readers.

Standard III.

Authorised Third Reader. Authorised Supplementary Readers.

Standard IV.

Authorised Fourth Reader. Authorised Supplementary Readers.

Standard V.

Authorised High School Reader. Authorised Supplementary Readers.

ORTHOEPY AND SPELLING.

Much attention should be given to accurate pronunciation. Pupils of the third, fourth and fifth standards should have constant practice in finding the pronunciation and meaning of words from the dictionary.

Special drills should be given on such words as are in their nature difficult to spell, and such as have been frequently misspelled in compositions. Pupils should not be drilled on the spelling of words which they may seldom or never have occasion to use.

Standard I.

Part I Phonic analysis and synthesis, copying words, oral spelling.

Part II Phonic analysis and synthesis, oral and written spelling of such words in each lesson as the pupil can learn while mastering the reading matter, transcription, dictation, uses of capital letters and terminal punctuation marks.

Standard II.

Phonic analysis and synthesis; transcription; oral and written spelling of such words in each lesson as the pupil can learn while mastering the subject matter—words to be arranged so far as possible in groups according to the similarity in form; dictation; careful attention to spelling in all written exercises; uses of capital letters, terminal punctuation marks, quotation marks.

Standard III.

Careful attention to spelling in all written work; exercises as in previous standards; division of words into syllables and marking the accent; common abbreviations and contractions; simple synonyms.

Standard IV.

Exercises as in previous standards; a few helpful rules of spelling formulated inductively; meaning of common prefixes and suffixes.

Standard V.

Exercises as in previous standards. Derivation and composition of words, exercises being confined mainly to words which have an English primitive. (Consult "High School Grammar," Chap. IV, especially pp. 88—90, exercises 1—X.)

COMPOSITION.

(a) Compositions should consist, almost entirely, of expressions of thoughts evolved in the teaching of such studies as geography, history, agriculture, literature, etc. (b) Through progressive exercises, both

critical and constructive, the pupils should be led to discover and apply the leading principles and maxims of expression. Only the most important errors should be corrected in any one composition.

Standard I.

Brief oral and written expression, in complete sentences, of simple thoughts suggested by observation of objects, animals, plants and pictures; narration of personal experiences; reproduction of the substance of the lessons in reading, etc.

Standard II.

(a) Brief oral and written description of observed objects, animals, plants and pictures; narration of personal experiences; reproduction of the substance of the lessons in reading, history, etc.; simple letter writing.

(b) Combining thoughts into a simple sentence; mechanics of a composition—heading, margins, etc.

Standard III.

(a) Correct oral expression of thoughts evolved in the teaching of all subjects; brief, accurate and legibly written expression of these thoughts; the paraphrase.

(b) Sentence structure in outline; use of the paragraph; forms for letters, accounts, and receipts; drill to correct the chief errors revealed in written expression.

Standard IV.

(a) Correct oral expression of thoughts evolved in the teaching of all subjects; brief, accurate and legibly written expression of these thoughts; the summary [abstract]; social and business letters.

(b) Sentence structure; paragraph structure in outline; drill to correct the chief errors revealed in written expression.

Standard V.

(a) Correct oral expression of thoughts evolved in the teaching of all subjects; rapid, accurate and legibly written expression of these thoughts; essay writing (themes).

(b) A systematic summary of the principles and maxims of expression previously discovered in practice; application of these in the correction of errors revealed in written expression; paragraph structure; pupils trained to criticise compositions in a methodical way.

GRAMMAR.

Grammar shows the structure of language. By revealing the rules of sentence building it helps the pupil in using correctly the forms of speech which the necessities of expression require. (Composition.)

Through the logical forms of subject, predicate and modifier it reveals the essential nature of thought and is an aid to the more thorough understanding of reading lessons.

The teaching of formal grammar should be brought into close connection with the work in reading and composition. Routine parsing and minute analysis should be avoided.

Standard I.

Oral correction of colloquial errors.

Standard II.

Correction of colloquial errors ; division of a sentence into subject and predicate.

Standard III.

Correction of errors in the language used by pupils. Kinds of sentences—assertive, interrogative, etc. ; purpose of each. Parts of speech, phrases, clauses—their functions and places in sentences. General analysis as an aid in getting the ideas in a sentence, and learning what words and groups of words do in the expression of thought.

Standard IV.

Correction of errors in the language used by pupils. Kinds of sentences—simple, compound, etc. ; purpose of each. Division of the parts of speech according to use ; inflection in outline. General analysis used as a means of discovering the relation and position of ideas in a sentence.

Standard V.

An intelligent comprehension of the prescribed text book.

HISTORY.

Training of the moral judgment, and preparation for intelligent citizenship are important aims in teaching history. History should be associated with geography and literature—historical poems, etc.

Standard II.

Canadian History.—Lives of distinguished men described, *e.g.*: Columbus, The Cabots, Jacques Cartier, Champlain, Bishop Laval, Frontenac, La Salle, Montcalm, Wolfe, Sir Guy Carleton, Lyon Mackenzie, Papineau, Joseph Howe, Alexander Mackenzie, Sir John Macdonald, etc. Discussion of the chief excellencies and defects in their characters to teach moral discrimination and, ultimately, to derive principles of conduct. Reading and reciting of patriotic poems.

Standard III.

Canadian History.—Outline study of leading features, *e.g.*: Discovery ; exploration ; struggle between the French and English colonists ; Treaty of Paris ; Quebec Act ; Constitutional Act ; War of 1812 ; Rebellion of 1837 ; Union Act ; Clergy Reserves ; Land Tenures—Feudal, Freehold, Leasehold, Seigniorial : Reciprocity Treaty ; British North America Act, etc.

English History.—Biography of persons honoured as types of state or individual life—*e.g.*: Caractacus, Julius Cæsar, (Arthur). Alfred, Canute, William I, Simon de Montfort, Edward I, Wolsey, Elizabeth, Charles I, John Hampden, Oliver Cromwell, Marlborough, Pitt, Nelson, Wellington, Lord John Russell, Victoria, etc. Discussion of their deeds to train moral judgment and incidentally to teach patriotism and civic duty. Reading and reciting patriotic selections.

In this standard the presentation is to be oral, no text book being prescribed. After the lesson, supplementary reading should be encouraged.

Standard IV.

Canadian History.—The text book studied as a review and expansion of the topics discussed in the previous standards.

English History.—Outline study of each people or period to exhibit its chief characteristics, *e.g.*: Saxons—a farmer people; brought with them the germs of our political institutions—a limited monarchy, parliament, courts of justice, personal holdings of land; gave us the body of our English tongue; became Christian from choice. The presentation of this outline is to be oral. Supplementary reading in history should be encouraged.

Standard V.

Canadian History.—An intelligent comprehension of the prescribed text; comparison of constitutional struggles in Canada with corresponding ones in England; outline study of how we are governed—parliamentary, judicial, municipal and school systems; our civic duties—voting, office-holding, tax-paying, support of law, etc.

English History.—The text book studied as a review and expansion of the topics discussed in previous standards. Grouping of the essential facts in each period under topics indicating phases of progress, *e.g.*: political, industrial, intellectual, æsthetic, religious—to show the growth of the nation

GEOGRAPHY.

Standard I.

Direction: Position of the sun in the morning, at noon, in the evening; cardinal points of the compass; location of important places and objects by pointing with the hand and naming the direction

Water: Observation of forms of water such as clouds, fog, mist, rain, dew, frost, snow and ice as they occur to find the more obvious qualities and uses of each

Winds: Recognition of calm, breeze, gale.

Standard II.

Direction: Semi cardinal points of the compass; observation of the directions of winds bringing heat, cold, rain, snow, moisture, dryness.

Land: Hills, mountains—direction and nature of their slopes; plain, valley, prairie; cape, peninsula, isthmus, island; relation of these bodies to one another; their uses. (Teacher's reference: "How to Study Geography," pp. 145—159, etc.)

- Water* : Fuller study of clouds, fog ; mist, rain, dew ; snow, ice, hail ; as to uses and effects of each. Effects of sun and winds on these
 Spring, brook, river—source, banks, branches, mouth—lake ; bay sea, strait ; relation of these bodies to one another ; their uses.
- Winds* : Calm, breeze, gale, storm, hurricane ; effects on land and sea, on plants, animals, people, vessels.
- Maps* : Construction of maps of school room, school grounds, neighbourhood ; map representation of geographical objects studied.
- The World as a Whole* : Outline study of its form, rotation, axis, poles, equator, hemispheres ; hot, temperate and cold parts.
- Continents* . Their relative positions and sizes ; characteristic animals and plants in each ; occupations, habits, dress and modes of life of the leading peoples in each.
- Oceans* : Their relative positions and sizes ; some characteristics of each.

Standard III.

- Land* : Mountain chains, slopes, great plains ; description and uses of each. (Teacher's reference : "How to Study Geography," p. XXV and pp. 145-147.)
- Water* : River systems.
- Continent Structure* : Great slopes, continental axis, land masses, secondary axis, great river basins, great river systems, coast lines. (Teacher's reference : "How to Study Geography," pp. 13-51 and 146-152.)
- The World as a Whole* : Relief—World ridge from Cape Horn to Cape of Good Hope.
- Lowlands : World basins—their position between the two highlands of each continent. Outline description of each.
- Drainage : World water parting ; world river systems.
- Winds : Elementary ideas of causes and influences of trade winds, return trades, polar currents, monsoons. (Consult "Child and Nature," pp. 170-174)
- Ocean Currents : Elementary ideas of causes and influences of Gulf Stream, Japan Current and polar streams. (Consult "Child and Nature," pp. 174-176.)
- Rainfall : Formation of clouds and rain ; places of much, little or no rain ; reasons.
- Climate : Outline study of distribution of climates. (Consult "Child and Nature," pp. 178-181.)
- Productions : Chief agricultural, grazing, lumbering and mining regions. (Consult "Child and Nature," p. 185.)
- People : The different races and their distribution.

NORTH AMERICA.

(References for Teacher's use. Parker's "How to study Geography," pp. 185-218. King's "Methods and Aids in Geography," chapters XIII-XVI. "The Story of our Continent."—Shaler.)

Position.

Structure : General description of primary and secondary highlands, river basins.

Drainage : Great water partings, great river systems, great lakes.

Outline : Shape, leading projections of land and water.

Climate : Temperature and moisture—their causes and influences generally.

Natural Productions and Productive Regions : Chief agricultural, grazing, lumbering and mining regions; surplus productions and exports; deficiency and imports.

Waterways and Railways : Noted trade routes.

Cities : Prominent commercial centres of the continent and their relation to belts of products.

Political Divisions : Their relation to the physical structure of the continent; capitals, forms of government, nationalities, state of civilisation.

North-West Territories : Studied generally as a review of a section of the continent; the agricultural, grazing, lumbering and mining regions; chief trade routes; about a dozen towns.

Standard IV.

Dominion of Canada studied as a review, with additions, of a section of the continent of North America. Same topics as for continent study. (Teacher's reference: "Geography of the British Colonies," by Dawson and Sutherland.)

South America : Outline study comparing its structure, drainage, coastline, climate and productive regions with those of North America. Political divisions—mainly Brazil, the Argentine Republic and Chili. (Teacher's reference: "How to Study Geography," pp 218-224. The "Geographical Reader"—American Book Company.)

Eurasia : (Europe and Asia.) General structure of Eurasia compared with that of North America and that of South America. (Teacher's reference: "How to Study Geography," pp. 224-263.)

Europe. Under the same topics as North America. Comparisons.

Asia. Only a very general study of climate, natural productions and productive regions, trade routes, cities. Political divisions—mainly India, Japan and China. Comparisons.

Standard V.

Africa and Australia. Brief study of general structure; brief comparisons of main features with those of other continents.

British Empire.

Motions of the earth, day and night—reasons; latitude, longitude, tropics, polar circles, eclipses.

Heat, winds, ocean currents, tides, rainfall, dew, ice, glaciers, etc.

Distribution of soil, vegetation, animals, races of men, minerals; causes.

Great commercial centres of the world, great routes of commerce. (Teacher's reference: "How to Study Geography," pp. 301-338; King's "Methods and Aids," chapters XVI-XVIII.)

NATURE STUDY AND AGRICULTURE.

(Teacher's reference books: Spalding's "Introduction to Botany," Newell's "From Seed to Leaf," Goodale's "Concerning a few Common Plants.")

To interest pupils in nature, to train them in habits of careful observation and clear expression, and to lead them to acquire useful knowledge are important aims in teaching this subject.

The pupil must study the plant, the animal and the soil rather than book descriptions of them. He may consult books after he has made his observations. The study of plant life should be emphasised in spring, though not restricted to that season.

This study should be connected with language, drawing and geography.

Standard I.

Plant Life :

Seeds : Bean, pea, sunflower, corn, wheat.

Germination : its conditions—light, air, moisture, soil, warmth.

Structure : covering, cotyledons, embryo.

Seedlings : Parts—stems, roots, leaves.

Buds : Poplar, willow, maple, elm, spruce.

Covering, unfolding, arrangement on stem.

Animal Life : Cat, dog, cow, horse, sheep, hen, fish.

Covering, food, uses.

Standard II.

Plant Life :

Seeds : Fuller study of the germination, growth and structure of seeds selected for Standard I.

Plant Structure : Herbs, shrubs, trees.

Stem : Its parts—wood, bark, pith ; their uses.

Root : Its parts—primary root, rootlets, root hairs, ; their uses.

Leaf : Its parts—stipules, stock, blade, veins ; their uses.

Fruits : Apple, orange or lemon, plum or cherry, pumpkins or squash, raspberry or strawberry ; the uses of their parts to the plant and to man.

Animal Life : Fuller study of the animals selected for Standard I, including structure of feet, head and teeth ; relation of structure and habits.

Standard III.

Plant Life :

Leaves : Their position, arrangement, form and venation ; their relation to sunlight, air, and direction of water to roots.

Flowers : Silverweed, anemone, rose, violet, everlasting pea, sunflower, wild bergamot ; arrangement and uses of their parts.

Roots : Wheat, willow, carrot, turnip, radish, potato. Their forms, and the uses of their parts to the plant and to man.

Soils : Outline study of formation, composition, classification, exhaustion, restoration. (Public School "Agriculture," chap. III.)

Animal Life : Ant, fly, grasshopper ; hawk, crane, duck ; gopher, wolf, muskrat : Adaptation of their forms and structure to their modes of life.

Standard IV.

Plants : Their food—its sources, how taken up, how assimilated ; their reproduction, propagation ; dissemination of seeds.

Weeds : Bindweed or wild buckwheat, tumbleweed, hedge mustard, stinkweed, Russian thistle ; methods of destroying. ("Agriculture," chap. XII.)

Trees : Their cultivation for shade, ornament and protection. ("Agriculture," chap. XIX.)

Soils : Preparation of, for seed. ("Agriculture," chap. VI.)

Animals : Feeding, care and management of horses, cattle, sheep and swine. ("Agriculture," chap. XIV.)

Insects : Growth, Classification, remedies. ("Agriculture," chap. XII.)

Standard V.

Tillage : Drainage, fertilisers, subsoiling. ("Agriculture," chap. V.)

Crops : Their growth, management, rotation ; diseases, remedies, soiling crops. ("Agriculture," chaps. VII, VIII, IX, XI.)

Animals : Principles of feeding. ("Agriculture," chap. XIII.)

Dairying : ("Agriculture," chap. XVII.)

ARITHMETIC.

Every new thought process in this subject should be developed objectively. Principles and rules should be arrived at inductively. Accuracy and rapidity in the simple fundamental processes are important.

Problems should, so far as possible, have due relations to the demands of modern commercial and business life. Clearness of reasoning, accuracy of statement and elegance of form in the solution of problems should be emphasised. Pupils should have regular practice in the construction of problems. The subject matter of nature study, agriculture, geography, etc., furnishes interesting data for many problems.

Standard I.

(Teacher's reference : Wentworth's "Primary Arithmetic.")

Part I.

Numbers 1 to 12—their combinations and separations, oral and written : the making and use of arithmetical signs.

Making and showing relation of one-half, one-fourth, one-eighth ; one-third, one-sixth ; one-fifth, one-tenth ; one-third, one-ninth, one-twelfth ; one-seventh ; one-eleventh. (Objective illustration—no figures used.)

Use and relation of pint, quart, gallon, peck, bushel ; inch, foot, yard ; day, week, month, year ; five cent and ten cent coins ; simple problems.

Part II.

Numbers 1 to 25—their combinations and separations.

Use and meaning of one-thirteenth one-twenty-fifth ; review of fractions in Part I.

Use and relation of ounce, pound ; hour, day ; foot, rod ; sheet, quire.

Counting to and from 25 by ones, twos, threes, etc. Drill in rapid figure work (especially in addition) involving combinations in the numbers 1 to 10. Reading Roman notation to XXV. Inventing and solving simple problems.

Standard II.

(Teacher's reference : Wentworth's "Primary Arithmetic.")

Numbers 25 to 100. Addition, subtraction, multiplication and division.

Use and meaning of one-twenty-sixth one-one-hundredth. Addition, subtraction, multiplication and division of fractions studied in Part I.

Percentage ; Use and meaning of 50%, 25%, 10%, 5%, $33\frac{1}{3}\%$, $12\frac{1}{2}\%$; relation to fractions.

Use and meaning of pound, bushel ; square inch, square foot, square yard ; finding area of small surfaces.

Counting to and from 100, by ones, twos, etc., to tens ; multiplication table made and mastered. Oral and written drill in rapid figure work (especially in addition) involving the combinations in the numbers 1 to 25. Reading Roman notation to C. Inventing and solving simple problems suggested by any subject studied.

Standard III.

Notation and numeration ; simple rules.

Common fractions : Addition, subtraction, multiplication and division of fractions whose denominators do not exceed one thousand. Common factor and common divisor as needed in fractions.

Decimal fractions : Addition, subtraction, multiplication and division of tenths, hundredths and thousandths ; relation to common fractions.

Percentage : Easy problems in simple interest and profit and loss, using such applications as occur in ordinary mercantile business.

Remaining weights and measures used in practical life, taught and applied ; measurement of surfaces and right angled triangles ; contents of rooms, boxes, lumber piles of wood and hay.

Oral and written drill in the figure work of the simple rules to secure accuracy and rapidity

Standard IV.

Common fractions. Decimal fractions, omitting recurring decimals.

Simple interest, profit and loss, commercial discount, commission. Problems should be confined to cases occurring in ordinary mercantile business.

Standard V.

Ratio and simple proportion with their applications to partnerships ; square root.

Mensuration : Chapters VII to IX, inclusive, in Hill's "Lessons in Geometry."

Geometry : Hill's "Lessons in Geometry."

At first, the pupil should discover geometrical truths through measurement, drawing construction and superposition rather than logical demonstration. In demonstrations, clearness of reasoning, accuracy of statement and elegance of form should be emphasised. "The subject matter of each lesson should be considered in its relation to life, *i.e.*, the actual occurrence, in nature and in the structures of machines made by man, of the geometrical forms studied ; and the application of the propositions to the ordinary affairs of life should be the basis and the outcome of every exercise."

Algebra : First 100 exercises in Clarkson's "Public School Algebra." —Scholar's edition.

DRAWING (PROVISIONAL COURSE).

(Teacher's reference: The Prang Primary Course in Art Education—Parts I and II by Hicks and Locke).

Drawing is to be taught as an added means of expression. Pupils are to draw in blank books after observing the type solids and objects.

Standard I.

Teach the following forms as wholes from type solids and objects :
Sphere and similar forms, natural and artificial, *e.g.*, ball, marble, apple, tomato, cherry, lemon, etc.

Cylinder and similar forms, natural and artificial, *e.g.*, pencil, bottle, spool, pint measure, cup, rope, ladder, mallet, etc.

Cube and similar forms, natural and artificial, *e.g.*, box, chest, basket, inkstand, lump of sugar, etc.

Teach their parts—surfaces, faces, edges and corners and the relation of these parts. Compare them.

Illustrative sketching in connection with nature study.

Standards II and III.

The work of Standard I and the following :

The type solids bisected and studied as new wholes.

Hemisphere and similar forms, natural and artificial, *e.g.*, half an apple, dish, bowl, cap, oil can, etc.

Half Cylinder and similar forms, natural and artificial, *e.g.*, bandbox, coin, etc.

Half Cube, square prism, right angled triangular prism, and similar forms, natural and artificial, *e.g.*, box, trunk car, roof of a house, etc.

Teach their parts—surfaces, faces, edges and corners, and the relation of the parts. Compare them.

Teach geometric figures—triangle, square and rectangle from the solid.

Draw objects based on these figures, *e.g.*, pennant, envelope, door, cross, flag, etc.

Illustrative sketching in connection with nature study.

Standards IV and V.

The work of previous standards and forms derived from the type solids by variation.

Spheroid, ellipsoid, ovoid, and similar forms, natural and artificial, *e.g.*, lemon, cucumber, watermelon, egg, hops, pear, strawberry, vase, etc.

Cone, circular frustrum, and similar forms, natural and artificial, *e.g.*, carrot, volcano, mountain peak, hour glass, wine glass, etc.

Pyramid, square frustrum and similar forms, natural and artificial, *e.g.*, cupolas, pyramids of Egypt, basket, etc.

Draw, from the solids, the geometric figures circle, ellipse, and oval, and learn the terms circumference, diameter, radius, arc, centre, focus, axis. Draw objects based on these figures, *e.g.*, target, circular window, hand mirror, eye glasses, horse shoe, padlock, fan, spoon, etc.

Illustrative sketching in connection with other studies.

MUSIC (PROVISIONAL.)

Standards I and II.

Singing of rote songs; drill on the scale and intervals—Normal Music Course First Reader, Part I.

Standards III, IV and V.

Normal Music Course First Reader. Second Reader when First is mastered.

HYGIENE—PHYSIOLOGY.

(Teacher's reference : Ontario Manual of Hygiene or Ontario Public School Physiology and Temperance.)

For convenience in teaching these subjects the ungraded school may be divided into two sections, the first comprising the pupils in Standards I and II and the second those in Standards III, IV and V. Practical effect should be given to the instruction in this subject by attention to the physical condition and habits of the children, the ventilation, lighting, heating and cleaning of the school room, and the supervision by the teacher of the sports and gymnastic exercises of the pupils.

Topics : Lessons on cleanliness, proper clothing, pure air, good water, exercise, rest, avoidance of draughts, wholesome food, temperate habits, bathing, accidents, poison, disinfectants, digestion, circulation, respiration, care of the eye and ear.

STIMULANTS AND NARCOTICS WITH SPECIAL REFERENCE TO THE USE OF ALCOHOL AND TOBACCO.

The great purpose is to build up in the mind a theory of self control and a willingness to abstain from acts that may grow into dangerous habits. The moral and social effects should be made prominent and abstinence be inculcated from higher ends than such as concern only the body. Technicalities and persistent dwelling upon details of disease should be avoided. Special delicacy of treatment is needed in those unfortunate cases in which children find themselves between the safe teaching of the school and the counter practices and influences of the home. Refrain from assertions of what is uncertain or sincerely doubted by high authority, or likely to be repudiated by the pupil when he is mature enough to judge for himself, since the admitted and unquestioned facts about the more dangerous stimulants and narcotics, and alcoholic drinks in particular, furnish invincible reasons why people in general should do without them and young people above all others.

Teach what a stimulant is, what a narcotic is, what each may cause; effects of alcohol on the digestive, circulatory, muscular and nervous system.

Teach that tobacco contains a poisonous substance called nicotine, that it frequently injures the throat, lungs, heart and other organs in adults, that it is far more harmful to young and growing persons than to adults, that it is particularly objectionable in the form of a cigarette, that children should avoid it in all its forms, and that the more sparingly grown people use it, the better, as a rule, they are off.

MANNERS AND MORALS.

(Teacher's reference : White's School Management, pp 218-294.)

Ungraded schools may be divided as in hygiene when direct instruction is given.

It is the duty of the teacher to see that the pupil practices those external forms of conduct which express a true sense of the proprieties of life and that politeness which denotes a genuine respect for the wants and wishes of others. It is his duty to turn the attention of the pupils to the moral quality of their acts and to lead them into a clear understanding and constant practice of every virtue. His own influence and example; the narration of suitable tales to awaken right feeling; the memorising of gems embodying noble sentiments, and maxims and proverbs containing rules of duty; direct instruction, etc., are means to be employed.

Topics : Cleanliness and neatness, politeness, gentleness, kindness to others, kindness to animals, love, truthfulness, fidelity in duty, obedience, nobility, respect and reverence, gratitude and thankfulness, forgiveness, confession, honesty, honour, courage, humility, self respect, self control, prudence, good name, good manners, temperance, health, evil habits, bad language, evil speaking, industry, economy.

COURSE OF STUDIES AND EXAMINATION REQUIREMENTS :
STANDARD V, 1902-3.

Approved August, 1902.

The following are the regulations governing the annual examination of pupils in Standard V.

The examination will be held towards the end of June or early in July at a date to be fixed by the Commissioner of Education.

Every candidate who desires to write shall make application, before the 24th day of May, to the Department in the form prescribed. There is no fee for examination. Applicants will write in their own schools and at their own expense. The teacher in charge of the school shall act as presiding examiner.

Course of Studies and Subjects of Examination.

Literature.—Intelligent comprehension of and familiarity with the following selections from Gage & Co.'s New Canadian Reader :—Book V. with memorisation of the finest passages : On My Mother's Picture, p. 9 ; Dora, p. 13 ; David Swan, p. 31 ; Rip Van Winkle, p. 47 ; Rosabelle, p. 97 ; The Glove and the Lions, p. 130 ; King Robert of Sicily, p. 179 ; The Vision of Sir Launfal, p. 186 ; The Birds of Killingworth, p. 216 ; The Blackbird, p. 228 ; To the Cuckoo, p. 233 ; The Green Linnet, p. 234 ; The Lotus-Eaters, p. 281 ; Village Characters, p. 285 ; The Brook, p. 294 ; Canada and Great Britain, p. 353 ; Canada and The Empire, p. 363 ; The Canadian Confederacy, p. 379 ; A Song of Canada, p. 380.

Composition.—The structure of the paragraph and sentence; the abstract, paraphrase and theme; social and business letters. Candidates will be required to write a short composition on some familiar subject.

History.—The leading events of Canadian History with particular attention to events subsequent to 1841; the outlines of English History. Text Book: Clement's History of Canada, and Buckley and Robertson's High School History.

Geography.—The general geography of the World; geography of Canada more particularly. Text Book: The New Canadian Geography (North-West edition).

Geometry.—First six chapters in Hill's "Lessons in Geometry." For examination candidates must provide themselves with ruler and compass.

Algebra.—Definitions, simple rules, simple equations with problems, simultaneous equations of the first degree containing two unknown quantities, with easy examples and problems, easy factoring, an elementary knowledge of H. C. F. and L. C. M. Text Book—C. Smith's Elementary Algebra (The McMillan Co.)

Hygiene and Temperance.—The topics named in the Programme of Studies.

<p><i>Orthoepy and Spelling,</i> <i>Grammar,</i> <i>Nature Study and Agriculture,</i> <i>Arithmetic,</i></p>	}	<p>The work prescribed for Standard V in the Programme of Studies.</p>
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Mensuration.—Areas as in Chapter VII, Hill's "Lessons in Geometry."

Drawing.—Representation, construction, decoration as in Prang's New Graded Course in Drawing for Canadian Schools, Books I and II. The W. J. Gage Co. Teacher's reference: The Manual.

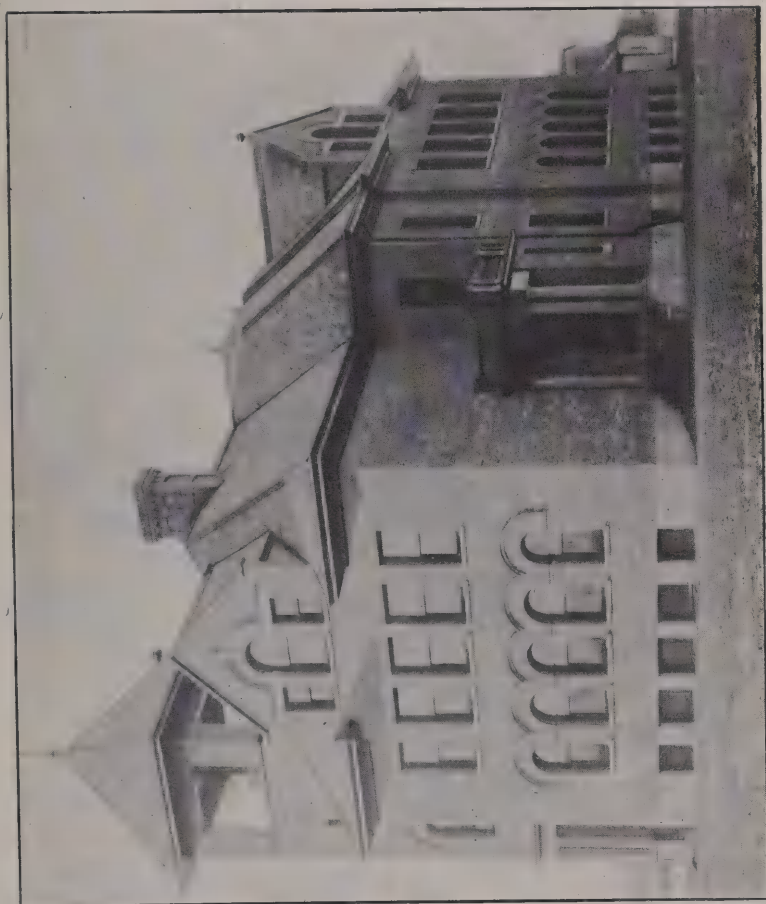
Candidates for examination will be required to write upon the following subjects: Literature, composition, history, geography, arithmetic and mensuration, geometry, orthoepy and spelling, grammar, nature study and agriculture and drawing.

There will be no examination in algebra or hygiene and temperance, but all pupils in Standard V shall be expected to give due attention to these subjects.

The marks for writing are awarded on the composition or letter in the composition paper.

Two marks are deducted for each misspelled word on the spelling paper and one mark for each misspelled word on the other papers.

To obtain pass standing candidates must make at least 50 per cent. of the aggregate marks, 40 per cent. on the paper in composition, and 33½ per cent. on every other paper.



PUBLIC SCHOOL, STRATHCONA, ALTA.



PUBLIC SCHOOL, YORKTON, ASSA.

APPENDIX H.

REGULATIONS OF THE DEPARTMENT OF EDUCATION
GOVERNING CERTIFICATES AND DIPLOMAS.

COURSES OF STUDY: STANDARDS VI, VII, VIII AND NORMAL SCHOOLS.

Approved August, 1902.

CERTIFICATES.

1. No person shall be permitted to teach in a Public School unless he holds a valid certificate of qualification granted by the Department of Education.

2. The certificates of qualification issued by the Department of Education shall be of the following classes:

(a) Interim certificates of the first and second class. These shall be valid for one year from the close of the school term during which they are issued. They may be granted upon the recommendation of the Principal of the Territorial Normal School to teachers-in-training who have attended one full session thereof and have received a favourable report.

(b) Professional certificates of the first and second class. These shall be valid during the pleasure of the Department of Education. They shall be granted to teachers who have attended a session of the Territorial Normal School, passed the professional examination, and have received a satisfactory report from an Inspector after having taught for at least one year in a Public School in these Territories.

(c) Third class certificates. These shall be valid for three years from June 30th of the year during which the holder thereof obtained standing entitling him to admission to a Local Normal School. They may be granted upon the recommendation of the Principal of the Territorial Normal School to teachers-in-training who have attended a full session of a Local Normal School and who have passed the prescribed examinations and tests in practical teaching.

(d) Provisional certificates. These shall be valid till the close of the school term during which they are issued. A provisional certificate may be granted only upon the application of a board of trustees that has failed to secure a duly qualified teacher, or upon the recommendation of an Inspector. A board of trustees in applying for a provisional certificate for any person, must satisfy the Department that a duly qualified teacher is not available. The board shall also furnish the Department with satisfactory evidence of the character and scholarship of the person for whom the certificate is requested.

(e) Kindergarten certificates for principals and assistants in Kindergartens.

3. On receiving an application from a board of trustees, accompanied by a recommendation from the Inspector, the Commissioner of Education

may, if a qualified teacher is not available, extend a third class or a provisional certificate to the end of the school term following that during which such certificate expired.

4. Persons whose teaching has been favourably reported upon by an Inspector, and whose third class certificates have expired, may, with the permission of the Commissioner of Education, have them renewed by passing the prescribed examination for Standard VI and an additional examination on pedagogy based upon such texts as may from time to time be authorised.

5. The Commissioner of Education may, if deemed advisable, extend the time during which any interim certificate is valid.

6. Upon the recommendation of the Principal of the Territorial Normal School the Commissioner of Education may permit teachers-in-training who have failed to pass the prescribed examinations at the close of the session to write upon such examination at a subsequent session, but in case of a second failure every such person who desires to qualify as a teacher shall be required to attend an additional session of the Territorial Normal School, or a Local Normal School, as the case may be, and pass the prescribed professional examination.

DIPLOMAS.

7. Every person who obtains pass standing on any one of the annual departmental examinations for Standards V, VI, VII or VIII shall receive a diploma, certifying the standing obtained.

PERSONS ELIGIBLE TO CERTIFICATES AND DIPLOMAS WITHOUT EXAMINATION.

8. Persons holding certificates of educational value, not obtained in the North-West Territories, may, upon application, receive such certificates or diplomas as the Commissioner of Education may deem them entitled to.

9. Every such applicant for a certificate must submit to the Department of Education (a) the certificates which he holds, (b) an official statement that his certificates are still valid, (c) a certificate of moral character dated within three months of the time of presentation, (d) a recent testimonial from the Inspector under whom he last taught.

EXAMINATION REQUIREMENTS, 1903.

Diplomas.

1. The annual departmental examinations, based on the course of studies for Standards V, VI, VII and VIII, shall be held between June 20th and July 15th at such times and places as may be determined by the Commissioner of Education.

2. Every candidate who desires to write upon any departmental examination shall make application before the 24th day of May to the Department of Education in the form prescribed. On the first day of examination each candidate shall hand to the presiding examiner the fee prescribed,

3. The teacher or principal (as the case may be) of every Public School from which candidates for examination come shall forward to the Department before June 30th a confidential report on each candidate under the following heads: Length of time preparing for examination, regularity of attendance, attitude towards work, general grasp of each subject, physical fitness for examination, whether candidate should pass for diploma.

4. No diploma will be granted to candidates until the Principal and Chairman of the school board report to the Department of Education that each obligatory subject of the Standard, whether prescribed for examination or not, has, in their judgment, received due attention on the part of such candidates while attending the school.

5. Before being permitted to write on the examination prescribed for Standards VII or VIII, candidates who intend to prepare for teaching shall be required to obtain standing on the subjects of examination of the next lower standard prescribed for such; provided, however, that the Commissioner of Education shall have power to admit to any examination candidates who submit satisfactory evidence of special qualifications.

6. In order to obtain pass standing on any departmental examination a candidate is required to make 50 per cent. of the aggregate marks for all papers, 40 per cent. on the paper in English composition, and $33\frac{1}{3}$ per cent. on every other paper, or on each part into which such other papers may be divided.

7. Candidates who fail to obtain the marks required to entitle them to pass standing in the examination for Standards VII or VIII may, upon recommendation of the Chairman of the board of examiners, be given standing of the next lower grade provided they have obtained 40 per cent. of the aggregate marks for all papers and 30 per cent. on each paper.

8. Any candidate who fails to pass on any departmental examination shall be furnished with a statement of his marks on each paper, and shall have the right to appeal within twenty days from the time the results of the examinations are announced. Each appellant shall state what answer papers he desires to have re-examined and the specific reason therefor. No appeal shall be considered unless it is accompanied by the fee prescribed.

9. The fees for departmental examinations shall be three dollars for Standards VI, VII or VIII and two dollars for appeals. If an appeal is sustained the fee shall be refunded.

Interim Certificates.

10. The departmental examinations for teachers-in-training at any Normal School shall be held at the close of the session and shall be conducted in accordance with the instructions issued by the Commissioner of Education.

11. To obtain a certificate of any class a candidate is required (a) to make 50 per cent. of the aggregate marks and $33\frac{1}{3}$ per cent. on each paper, (b) to pass the prescribed test in the practice of teaching, (c) to obtain from the Principal a satisfactory report upon conduct, department and aptitude for the work of teaching.

12. any person who holds a second class certificate issued by the Department of Education shall be permitted to write upon the examination for a first class intermin certificate without attendance during the Normal session.

COURSE OF STUDIES AND SUBJECT OF EXAMINATION.

Standard VI.

1. *Reading*.—A general knowledge of the subject-matter of the books prescribed for reading. These books are for independent supplementary reading rather than study. Practice in oral reading.

Prescribed books 1903, 1904: Longfellow's *Evangeline* (Riverside Literature Series, No. 1); Scott's *The Lady of The Lake* (R. L. S. No. 53); Dickens' *Christmas Carol* (R. L. S. No. 57); Goldsmith's *Vicar of Wakefield* (R. L. S. No. 78); Lamb's *Tales from Shakespeare* (R. L. S. No 64-66 in one volume).

2. *English Composition*.—Letter writing. Short compositions based chiefly on subjects chosen from the books prescribed for general reading. Knowledge of these subjects is regarded as less important than the ability to write good English. Work notably defective in point of spelling, writing, punctuation, or division into paragraphs will not be accepted at examinations. Instruction in the fundamental principles of rhetoric should be given in connection with this study.

3. *English Literature*.—A thorough study of the subject matter, structure and language of each prescribed selection. Memorisation of fine passages.

Prescribed Poetical Literature, 1903, 1904: Selections edited by Saul and McIntyre, pp 1-108 (The Copp, Clark Co.)

Prescribed Prose Literature, 1903, 1904: Scott's *Ivanhoe* (recommended for teacher's reference, the edition by Bliss Perry in Longman's English Classics).

4. *English Grammar and Rhetoric*.—A general knowledge of the High School Grammar. Definite instruction in the choice of words, in the structure of sentences and of paragraphs, and in the simple forms of narration, description and exposition.

Text Book: Syke's *Elementary English Composition* (The Copp, Clark Co.)

5. *History*.—The leading events of Canadian and British History. Examinations in history will be so framed as to require comparison and the use of judgment on the student's part rather than the mere use of memory.

Text Books: Clement's *History of Canada*; Buckley and Robertson's *High School History*.

6. *Geography*.—The general geography of the world; geography of Canada and the British Empire more particularly.

Text Books: *The New Canadian Geography*—North-West edition (W. J. Gage & Co.); *Geography of the British Colonies*, Dawson and Sutherland (The MacMillan Co.)

7.—*Arithmetic and Mensuration*.—Pure arithmetic, commercial arithmetic (omitting annuities).

Text Books: Hamblin Smith's Arithmetic—Twentieth Century edition (W. J. Gage & Co.) For additional mensuration consult Hill's Lessons in Geometry (Ginn & Co.) chapters VII to IX inclusive.

8. *Algebra*.—Definitions, elementary rules, simple equations of one, two and three unknown quantities, problems, factors, highest common factor, least common multiple, fractions, easy quadratics.

Text Book: C. Smith's Elementary Algebra, chapters I to XIV inclusive.

9. *Geometry*—Euclid's Elements, Book I, with easy deductions.

Text Book: Todhunter and Loney (The MacMillan Co.)

10. *Book-keeping*.—A knowledge of business forms, usages, and correspondence; book-keeping by single and double entry.

Text Book: Black's Public School Book-keeping (The Copp, Clark Co.)

11. *Botany and Agriculture*.—*Botany*: (a) As in Bergen's Foundations of Botany without Key and Flora (omitting chapters VI, XII, XIV, XIX, XX, XXI, XXII, XXIII), (Ginn & Co.); (b) A knowledge of the structure, function and relation of the root, stem, leaf and flower of typical plants belonging to the orders Ranunculaceae, Cruciferae, Leguminosae, Rosaceae and Liliaceae. Determination of plants belonging to these orders. Field work by each student is essential.

References: Spotton's High School Botany—Manitoba edition; Coulter's Plant Relations (D. Appleton & Co.)

Agriculture.—As in C. C. James' Agriculture (George N. Morang & Co.) Recommended for teachers' reference—Bailey's Principles of Agriculture (The MacMillan Co.)

12. *Physics*.—As in Merchant and Fessenden's High School Physical Science, Part I (The Copp, Clark Co.)

13. *Drawing*—Representation, construction, decoration as in Prang's New Graded Course in Drawing, for Canadian Schools, Books, I, II and III (W. J. Gage & Co.) Teachers' Reference—The Manual.

14. *Latin*.—Grammar, reading, composition.

Text Book: Henderson and Fletcher's First Latin Book, pp. 1-191 inclusive.

15. *French*.—Grammar, reading, composition and conversation.

Text Book: Fraser and Squair's French Grammar and Reader (The Copp, Clark Co.)

16. *German*.—Grammar, reading, composition and conversation.

Text Book: High School German Grammar and Reader to page 142, together with a knowledge of the conjugation of strong verbs.

The *obligatory* subjects are reading, English composition, English literature, English grammar and rhetoric, history, geography, arithmetic and mensuration, algebra, geometry, botany and drawing.

The *optional* subjects are book-keeping, agriculture, physics, Latin, French and German.

For students *intending to become teachers*, or to enter a profession, an examination in the following subjects of Standard VI will be held

annually : English composition, English literature, British and Canadian history, geography, arithmetic and mensuration, algebra, book-keeping, agriculture and botany, physics, and drawing.

Students *intending to proceed to a University* should take the languages prescribed for a matriculation therein.

The examination in *pedagogy* for persons who desire to have their *Third Class Certificates renewed* shall be based upon Lloyd Morgan's *Psychology for Teachers* (Scribner's) and Landon's *Teaching and Class Management*.

Standard VII.

1. *Reading*.—A general knowledge of the subject-matter of the books prescribed for reading. These books are for independent supplementary reading rather than study. Practice in oral reading.

Prescribed books for 1903, 1904: Tennyson's *The Princess*, Enoch Arden, *Ode on the Death of the Duke of Wellington* (MacMillan's Sixpenny Series); Ruskin's *Sesame and Lilies* (The Copp, Clark Co., Silver Burdett & Co. or R. L. S. No. 142); Irving's *Sketch Book* (R. L. S. No. 7 or Ginn & Co. Selections in Classics for Children); Scott's *The Talisman*.

2. *English Composition*.—Letter writing. Short compositions based chiefly on subjects chosen from the books prescribed for general reading. Knowledge of these subjects is regarded as less important than the ability to write good English. Work notably defective in point of spelling, writing, punctuation, or division into paragraphs will not be accepted at examinations. Instruction in the fundamental principles of rhetoric should be given in connection with this study.

3. *English Literature*.—A thorough study of the subject-matter structure and language of each prescribed selection. Memorisation of fine passages.

Prescribed Poetical Literature 1903: Alexander's *School Anthology of English Poetry* (The Copp, Clark Co.) Books I and II; 1904: Books II and III; Shakespeare's *The Merchant of Venice*, 1903; Julius Caesar, 1904. Prescribed Prose Literature, 1903: George Eliott's *Silas Marner*, (R. L. S. No. 83); 1904, *The Mill on the Floss*.

4. *English Grammar and Rhetoric*.—As in the *High School Grammar*, revised edition. Definite instruction in the choice of words, in the structure of sentences and of paragraphs, and in the forms of narration, description, exposition and argument.

Text Books: Sykes' *Elementary English Composition* (The Copp, Clark Co.). Recommended for Teachers' reference: Genung's *Practical Rhetoric* (Ginn & Co.)

5. *History*.—Outline of the World's History.

Text Book: Swinton's *Outlines of the World's History* (American Book Company.)

6. *Geography*.—Physical Geography.

Text Book: *Elementary Physical Geography* by R. S. Tarr (The MacMillan Co.)

7. *Algebra*.—Definitions, elementary rules, simple equations of one, two and three unknown quantities, problems, factoring, highest common factor, least common multiples, fractions, equations with fractions,

quadratic equations, simultaneous equations of the second degree, powers and roots, indices, surds.

Text Book : C. Smith's Elementary Algebra, chapters I to XX inclusive.

8. *Geometry*.—Euclid, Books I, II and III ; deductions.

Text Book : Todhunter and Loney's Euclid.

9. *Animal Life*.—As in Jordan and Kellogg's Animal Life (D. Appleton & Co.), especially chapters I, II, IV, VI, VII, VIII, IX, XII, XIV, XV, XVI.

10. *Chemistry*.—As in Waddell's School Chemistry (The MacMillan Co.)

11. *Drawing*—Representation, construction, decoration as in Prang's New Graded Course in Drawing for Canadian Schools ; Books IV and V (W. J. Gage & Co.) Teachers' reference : The Manual.

12. *Latin*.—Translation into English of passages from prescribed texts.

Translations at sight (with the aid of vocabularies) of passages from some easy prose author, to which special importance will be attached. Candidates will be expected to have supplemented the reading of the prescribed texts by additional practice in the translation of Latin.

Grammatical questions on the passages from prescribed texts shall be set, and such other questions as arise naturally from the context.

Translation into Latin of sentences and of easy narrative passages based upon the prescribed prose texts.

The following are the prescribed texts :

1903. Virgil, *Æneid*, Book II. (1-505.)

Cæsar, *Bellum Gallicum*, Books II and III.

1904. Virgil, *Æneid*, Book II. (1-505.)

Cæsar, *Bellum Gallicum*, Book IV (omitting chapter 17) and Book V, chapters 1-23.

Two papers as follows :

(a) Virgil and Cæsar.

(b) Latin grammar, prose composition and sight work.

Henderson and Fletcher's First Latin Book.

13. *French*.—

(a) Grammar.

(b) Composition. (1) Translation into French of short sentences as a test of the candidate's knowledge of grammatical forms and structure, and the formation in French of sentences of similar character ; and (2) Translation of easy passages from English into French.

(c) Authors: Translation of unspecified passages from easy French authors. An examination on the following texts :

1903 : LAMENNAIS, *Paroles d'un Croyant*, Chapters VII and XVII ; PERRAULT, *Le Maître Chat ou Le Chat Botte* ; DUMAS, *Un Nez Gele*, and *La Pipe de Jean Bart* ; ALPHONSE DAUDET, *La Dernière Classe*, and *La Chevre de M. Seguin* ; LEGOUVE, *La Patte de Dindon* ; POUVILLON, *Hortibus* ; LOTI, *Chagrin d'un Vieux Forcat* ; MOLIERE, *L'Avare*, Acte III, Sc. 5 (*Est-ce a votre Cocher... sous la mienne*) ; VICTOR HUGO, *Waterloo*, Chapter IX ; ROUGET DE L'ISLE, *La Marseillaise* ; ARNAULT, *La Feuille* ; CHATEAUBRIAND, *L'Exile* ; THEOPHILE GAUTIER, *La Chimere* ; VICTOR HUGO, *Extase* ; LAMARTINE, *L'Automne* ; DE MUSSET, *Tristesse* ;

SULLY PRUDHOMME, *Le Vase Brise*; LA FONTAINE, *Le Chene et le Roseau*.

FEUILLET, *Le Village*

1904: LAMENNAIS, *Paroles d'un Croyant*, Chapters VII and XVII; PERRAULT, *Le Maitre Chat ou Le Chat Botte*; DUMAS, *Un Nez Gele*, and *La Pipe de Jean Bart*; ALPHONSE DAUDET, *La Derniere Classe*, and *La Chevre de M. Seguin*; LEGOUVE, *La Patte de Dindon*; POUVILLON, *Hortibus*; LOTI, *Chagrin d'un Vieux Forcat*; MOLIERE, *L'Avare*, Acte III, Sc. 5 (*Est-ce a votre Cocher... sous la mienne*); VICTOR HUGO, *Waterloo*, Chapter IX; ROUGET DE L'ISLE, *La Marseillaise*; ARNAULT, *La Feuille*; CHATEAUBRIAND, *L'Exile*; THEOPHILE GAUTIER, *La Chimere*; VICTOR HUGO, *Extase*; LAMARTINE, *L'Automme*; DE MUSSET, *Tristesse*; SULLY PRUDHOMME, *Le Vase Brise*; LA FONTAINE, *Le Chene et le Roseau*.
DAUDET, *La Belle Nivernaise*.

14. *German*.—

(a) Grammar.

(b) Composition. (1) Translation into German of short English sentences as a test of the candidate's knowledge of grammatical forms and structure, and the formation in German of sentences of similar character; and (2) Translation of easy passages from English into German.

(c) Authors: Translation of unspecified passages from easy German authors. An examination on the following texts:

1903: GRIMM, *Rotkaeppchen*; ANDERSON, *Wie's der Alte macht*, *Das neue Kleid*, *Venedig*, *Rothschild*, *Der Baer*; ERTL, *Himmelsschluessel*; FROMMEL, *Das eiserne Kreuz*; BAUMBACH, *Nicotiana*, *Der Goldbaum*; HEINE, *Lorelei*, *Du bist wie eine Blume*; UHLAND, *Schaefer's Sonntagsglied*, *Das Schloss am Meer*; CHAMISSO, *Das Schloss Boncourt*; CLAUDIUS, *Die Sterne*, *Der Riese Goliath*; GOETHE, *Mignon*, *Erlkoenig*, *Der Saenger*; SCHILLER, *Der Juengling am Bache*.

LEANDER, *Traeumereien* pp. 46-90 (selected by Van Daell).

1904: GRIMM, *Rotkaeppchen*; ANDERSON *Wie's der Alte macht*, *Das neue Kleid*, *Venedig*, *Rothschild*, *Der Baer*; ERTL, *Himmelsschluessel*; FROMMEL, *Das eiserne Kreuz*; BAUMBACH, *Nicotiana*, *Der Goldbaum*; HEINE, *Lorelei*, *Du bist wie eine Blume*; UHLAND, *Schaefer's Sonntagsglied*, *Das Schloss am Meer*; CHAMISSO, *Das Schloss Boncourt*; CLAUDIUS *Die Sterne*, *Der Riese Goliath*; GOETHE, *Mignon*, *Erlkoenig*, *Der Saenger*; SCHILLER, *Der Juengling am Bache*.

BAUMBACH, *Waldnovellen*.

The *obligatory* subjects are reading, English grammar and rhetoric, English composition, English literature, general history, physical geography, algebra, geometry, animal life and drawing.

The *optional* subjects are chemistry, Latin, French and German.

Students may *elect* Latin instead of algebra, and French or German instead of English grammar and rhetoric or chemistry.

For students *intending to become teachers*, or to enter a profession, an examination on the following subjects in Standard VII will be held annually: English grammar and rhetoric, English composition, English literature, general history, physical geography, algebra, geometry, animal life and chemistry; but students may offer Latin instead of algebra; either French or German instead of either English grammar and rhetoric, or chemistry; or French and German instead of English grammar and rhetoric and chemistry.

Students desiring *standing equivalent to Matriculation* must select

for examination the languages and other subjects prescribed therefor by the University.

Standard VIII.

1. *Reading*.—A general knowledge of the subject-matter of the books prescribed for general reading.

Prescribed books, 1903, 1904: Matthew Arnold's *Sohrab and Rustum* and other poems (Silver Burdett & Co.); Browning's *The Lost Leader*, *Kabbi Ben Ezra*, *The Grammarian's Funeral* and other poems (R. L. S. No. 115); De Quincey's *Flight of a Tartar Tribe* (R. L. S. No. 110); Macaulay's *Life and Writings of Addison* (R. L. S. No. 104); Thackeray's *Pendennis*.

2. *English Composition*.—Letter writing. Short composition based chiefly on subjects chosen from the books prescribed for general reading. Knowledge of these subjects is regarded as less important than the ability to write good English. Work notably defective in point of spelling, writing, punctuation, or division into paragraphs will not be accepted at examinations. Instruction in the principles of rhetoric should be given in connection with this study.

3. *English Literature*.—A thorough study of the subject-matter, structure and language of each prescribed selection. Memorisation of fine passages.

Prescribed Poetical Literature, 1903, 1904: Tennyson's *The Palace of Art*, *Locksley Hall*, *In Memoriam* (MacMillan's Sixpenny Series); Milton's *L'Allegro*, *Il Penseroso*, *Lycidas*, *Comus* (R. L. S. No. 72); 1903, Shakespeare's *The Merchant of Venice* and *Hamlet*; 1904, *Julius Cæsar* and *The Tempest*.

Prescribed Prose Literature, 1903: Hawthorne's *The House of the Seven Gables*, edited by Herrick (Scott, Foresman & Co., Chicago), recommended; 1904, Hawthorne's *The Marble Faun* (R. L. S. No. 148).

4. *English Language and Rhetoric* —

Text Books: Burt's *Elementary Phonetics*, Gummere's *Handbook on Poetics*, Genung's *Practical Elements of Rhetoric* (Ginn & Co.).

5. *History*—Constitutional and Industrial.

Text Books: Bagehot, *The English Constitution* (Kegan, Paul, Trench & Co.); Bourinot, *How Canada is Governed*, revised edition, 1902 (The Copp, Clark Co.); Cunningham's *Outlines of English Industrial History* (The MacMillan Co.)

6. *Algebra*.—C. Smith's *Elementary Algebra*.

7. *Geometry*.—Euclid, Books I, II, III, IV; definitions of Book V; propositions 1, 2, 3, A, 4, 33 of Book VI; deductions.

Text Book: Todhunter and Loney.

8. *Trigonometry*.—As in D. A. Murray's *Plane Trigonometry and Tables* (Longmans & Co.)

9. *Physics*.—The *Elements of Physics*.

Text Books: Gage's *Introduction to Physical Science* (Revised edition, 1902, Ginn & Co.)

10. *Latin*.—(a) Horace—*Odes*, Book III. (Omitting VII, X, XV, XX, XXVI. Cicero—*In Catilinam I.*, and *Pro Archia*.)

- (b) Grammar—Bennett, with special reference to parts I to IV.
Composition—Fletcher & Henderson's Latin Prose Composition, together with continuous prose composition based on authors read.

11. *French* :

- (1). Grammar and Composition—Writing easy French from dictation ; translation from English into French ; translation of unspecified passages from easy modern French prose. (Grandgent's Composition.)
(2). An examination on prescribed texts.
1903. Racine—*Athalie*.
Halevy—*L'Abbe Constantin*. (Heath & Co.)

12. *German* :

- (1). Grammar and Composition—Writing easy German from dictation ; translation from English into German ; translation of unspecified passages from easy modern German prose.
(2). An examination of prescribed texts.
1903. *Drei Kleine Lustspiele*. (Heath & Co.)
Elster—*Zwischen den Schlachten*. (The MacMillan Co.)

The *obligatory* subjects are reading, English composition, English literature, English language and rhetoric, history and physics.

The *optional* subjects are algebra, geometry, trigonometry, Latin, French and German.

Students may *select* Latin instead of algebra and either French or German instead of geometry or trigonometry.

For students *intending to become teachers* an examination on the following subjects in Standard VIII will be held annually : English composition, English literature, English language and rhetoric, history, physics, algebra, geometry, trigonometry, Latin, French and German, but students may offer Latin instead of algebra, either French or German instead of either geometry or trigonometry ; or French and German instead of geometry and trigonometry.

LOCAL NORMAL SCHOOL.

Third Class Certificates.

1. *The Science of Education*.—The nature and aim of education, teaching and instruction ; outline of helpful portion of mental science ; application of the principles derived therefrom to teaching and government.

2. *The Art of Education*.—Methods of teaching each subject on the programme of studies for schools ; school organisation ; school management ; school hygiene ; duties of teachers and pupils as set forth in The School Ordinance and Regulations. Practice in teaching.

Text Books : Garlick's *New Manual of Method* ; White's *Elements of Pedagogy* ; Ontario *Manual of Hygiene*, chapters 1, 2, 3, 4, 5, 10, 11, 12, 13, 14, 15, 22 ; The *Prang Course in Drawing for Ungraded Schools* ; the *Normal Music Course First Reader*, new and enlarged edition (Silver, Burdett & Co.)

Candidates will be required during the second week of the session to pass an examination on *Tilley's Methods in Teaching*. (Geo. N. Morang & Co.)

TERRITORIAL NORMAL SCHOOL.

Second Class Interim Certificate.

1. *The Science of Education.*—The nature and aim of education, teaching and instruction ; psychology and ethics as the scientific basis of the art of education ; their application to the development of the intellectual and moral powers.

2. *The Art of Education.*—Outlines of general method ; application to the teaching of each subject on the programme of studies ; school organisation ; school management ; school hygiene ; school law ; practice in teaching.

3. *The History of Education.*—System and theories of education ; eminent educators.

Text Books : Dexter and Garlick's Psychology in the School Room (Longman's), Landon's Teaching and Class Management, White's School Management, The Report of the Committee of Five, Manual of Hygiene, School Ordinance, The Prang Course in Drawing for Ungraded Schools, The Normal Music Course First Reader, new and enlarged edition. Lectures.

Reference for History of Education—Browning's Educational Theories and Quick's Educational Reformers (Appleton's edition, 1891.)

Candidates will be required during the second week of the session to pass an examination on Fitch's Lectures on Teaching.

First Class Interim Certificate.

1. *The Science of Education.*—Nature, form and limits of education ; development and training of man ; education values ; psychological and logical sequence of subjects ; general method.

2. *The Art of Education.*—Application of principles derived from the science of education to the teaching of each subject on the programme of studies ; school organisation ; school management ; school law ; practice in teaching.

3. *The History of Education.*—Systems and theories of education ; eminent educators.

Text Books : Rosenkranz' Philosophy of Education, Sully's Hand Book of Psychology (Revised edition), De Garmo's Essentials of Method (Revised edition), Landon's Teaching and Class Management, White's School Management, Laurie's Lectures on Linguistic Method, Herbert Spencer's Education, Report of the Committee of Ten, The Prang Course in Drawing for Ungraded Schools, The Normal Music Course First Reader, new and enlarged edition.

Candidates in attendance will be required during the second week of the session to pass an examination on Fitch's Lectures on Teaching.

APPENDIX I.

TEXT BOOKS AUTHORISED FOR USE IN SCHOOLS.

Standards I-V.

Readers: Ontario Series.—First Reader (Part I, Part II), Second, Third and Fourth, and Gage's New Canadian Reader, Book V.

Dominion Readers: Optional for Roman Catholic Separate Schools—First Reader (Part I, Part II), Second Reader.

Bilingual Series: Optional in schools where French is the vernacular—First Reader (Part I, Part II), Second Reader.

German Readers: Ahn's First German Book, Ahn's Second German Book.

Supplementary: Their use is optional in all schools—Standard I, Part I: Appleton's First Reader; Part II, *Sea Side and Way Side, No. I (Animal Life); *Bass' Nature Stories for Young Readers (Plant Life); †Scudder's Verse and Prose for Beginners (No. 59 R. L. S.) Standard II: *Sea Side and Way Side, No. 2; †Fables and Folk Stories, Parts I and II (Nos. 47, 48 R.L.S.) Standard III: *Sea Side and Way Side, No. 3; †Selections from Child Life in Poetry (No. 70 R.L.S.) Standard IV: †John Burrough's Birds and Bees (No. 28 R.L.S.), †Dickens' Christmas Carol (No. 57 R.L.S.)

Copy Books: Gage's Practical System of Vertical Writing.

Arithmetic: Elementary Arithmetic by Kirkland & Scott, revised and enlarged edition.

Grammar: New Elementary Grammar, Goggin.

History: Buckley & Robertson's History of England; Clement's History of Canada.

Geography: The New Canadian Geography — North-West Territories edition.

Agriculture: Agriculture by C. C. James.

Geometry: Hill's Lessons in Geometry.

Algebra: C. Smith's Elementary Algebra.

Drawing: Prang's New Graded Course in Drawing for Canadian Schools. Books I and II.

Music: The Normal Music Course—First and Second Readers revised and enlarged. First Series of Charts, Second Series of Charts.

Recommended as References for Teachers.

Geography: Parker's How to Study Geography, King's Methods and aids in Geography. Fry's Child and Nature, Shaler's The Story of our Continent, Dawson and Sutherland's The Geography of the British Colonies.

Nature Study and Agriculture: Newell's From Seed to Leaf, Goodale's Concerning a Few Common Plants, Grant Allen's The Story of the Plants.

*D. C. Heath & Co., Boston.

†Houghton, Mifflin & Co., Riverside Literature Series, Boston.

Arithmetic : Wentworth's Primary Arithmetic.

Drawing : The Prang Primary Course in Art Education.

Hygiene and Physiology : Ontario Manual of Hygiene, Public School Physiology and Temperance.

Manners and Morals : White's School Management.

Standards VI-VIII.

Grammar : Seath's High School Grammar (Revised edition).

Composition and Rhetoric : Syke's Elementary English Composition; Genung's Practical Rhetoric; Burt's Elementary Phonetics; Gummere's Handbook on Poetics; Genung's Practical Elements of Rhetoric.

Literature : Poetical and Prose.—Prescribed selections for each standard.

History : Canadian.—Clement's History of the Dominion of Canada.

British.—Buckley and Robertson's High School History.

General.—Swinton's Outline of World's History.

Constitutional.—Bagehot's The English Constitution;

Bourinot's How Canada is Governed.

Industrial.—Cunningham's Outlines of English Industrial History.

Geography : The New Canadian Geography (North-West edition); Dawson and Sutherland's Geography of the British Colonies; Tarr's Elementary Physical Geography.

Mathematics : Hamblin Smith's Arithmetic (Twentieth Century edition); C. Smith's Elementary Algebra; Todhunter and Loney's Geometry; Black's Public School Book-Keeping; Murray's Plane Trigonometry and Tables.

Science : Bergen's Foundation of Botany (without Key and Flora); Spotton's High School Botany (Manitoba edition); Coulter's Plant Relations; C. C. James' Agriculture; Bailey's Principles of Agriculture; Merchant and Fessenden's High School Physics; Gage's Introduction to Physical Science (revised edition, 1902); Jordan and Kellogg's Animal Life; Waddell's School Chemistry.

Classics : Henderson and Fletcher's First Latin Book; Henderson and Fletcher's Latin Prose Composition; Bennett's Grammar;—selections for translation,—as prescribed.

Moderns : Fraser and Squair's French Grammar and Reader; High School Grammar and Reader (French); High School Grammar and Reader (German); Grandgent's Composition;—selections for translation,—as prescribed.

Drawing : Prang's New Graded Course in Drawing for Canadian Schools.

NORMAL SCHOOLS.

Local Normal Schools. (Third Class.) Garlick's New Manual of Method's with Appendix, Tilley's Methods in Teaching, School Ordinance and Regulations, Ontario Manual of Hygiene.

The Normal School. (Second Class.) Dexter and Garlick's Psychology in the School Room, Landon's Teaching and Class Management, White's School Management, The Report of the Committee of Five, Ontario Manual of Hygiene, School Ordinance and Regulations; and Browning's Educational Theories and Quick's Educational Reformers as references; Fitch's Lectures on Teaching.

(First Class.) Rosenkranz' Philosophy of Education, Sully's Handbook of Psychology (Revised edition), De Garmos' Essentials of Method (Revised edition), Landon's Teaching and Class Management, White's School Management, Laurie's Lectures on Linguistic Method, Herbert Spencer's Education, Report of the Committee of Ten, Fitch's Lectures on Teaching.

In all classes, Drawing and Music as for Public School Standards.

APPENDIX J.

TOWN DISTRICTS, 1902.

Public Schools.

No.	Name of District.	Departments	Principal.	Certificate.	Salary.	Enrolment.
1	Moose Jaw.....	8	Augustus H. Ball, B.A.	1	\$1,000	466
2	Qu'Appelle.....	4	C. C. Stewart.....	1	800	202
3	Prince Albert.....	6	Chas. Nivins, B.A.....	1	1,000	341
4	Regina.....	10	E. B. Hutcherson, B.A.	1	1,050	486
7	Edmonton.....	10	Wm. Rea, B.A.....	1	1,200	577
10	P. Albert East.....	2	Alex. E Ewing.....	1	720	89
12	Moosomin.....	7	C. H. Lee, B.A.....	1	1,050	330
19	Calgary.....	15	J. F. Boyce, B.A.....	1	1,300	971
25	Wolseley.....	3	J. F. Middlemiss.....	1	810	142
47	Macleod.....	4	A. E. Torrie.....	1	1,200	193
49	Indian Head.....	4	J. J. Currie.....	1	750	241
51	Lethbridge.....	7	Jas. McCaig, B.A.....	1	1,210	389
57	Whitewood.....	3	A. J. Mather, B.A.....	1	800	148
76	Medicine Hat.....	9	J. W. Brown, B.A.....	1	1,200	458
104	Red Deer.....	3	A. T. Stepherson.....	2	800	165
159	Yorkton.....	4	D. Burke.....	1	800	265
216	Strathcona.....	8	D. S. McKenzie.....	1	1,200	494
243	Nelson (Lacombe).....	5	Angus M. McDonald..	1	600	222
264	Wetaskiwin.....	4	Janet F. Robinson....	1	720	285
457	Cardston.....	4	Chas. E. Cameron....	1	900	352

Roman Catholic Separate Schools

1	Lacombe (Calgary).....	5	Rev. Sr. M. Greene, B.A	1	500	263
6	Prince Albert.....	2	Maggie M. McKinley..	1	600	115
7	St. Joachim (Edmonton) .	4	Rev. Sr. Quigley, F.C.J.	1	700	193
8	Holy Cross (Macleod) . .	1	Isabella Milne.....	2	500	57
9	Lethbridge.....	3	Rev. Sr. F. McCormack	1	700	194
12	St. Anthony (Strathcona)	1	Rev. Sr. Teresa Ambrose	2	600	74
13	Graton (Regina).....	2	Lewis L. Kramer.....	2	660	144
15	Sacred Heart (Wetaskiwin)	1	James Quinlan.....	2	600	52

APPENDIX K.

SCHOOL DISTRICTS ERECTED, 1902.

Assiniboia.

NAME.	NO.	DATE OF ERECTION.	GENERAL LOCATION.			SECRETARY.
			Tp.	Rg.	M	
Goshen	662	Jan. 14..	2, 3	33	1	Wm. Jackson, Carnduff
Fish Creek	664	Jan. 27..	8, 9	27	3	David White, Maple Creek
Mariahilf	666	Jan. 1..	19, 20	6	2	Heinrich Exner, Mariahilf
South Weyburn	670	Feb. 11..	7, 8	14	2	D. Spafford, Weyburn
Fairplain	673	Feb. 27..	4, 5	3	2	A. B. Hatchard, Alameda
Actonvale	674	Feb. 27..	9, 10	15	2	Jos. Aconley, Yellow Grass
West Weyburn.	675	Feb. 27..	8, 9	15	2	Robt. Ewart, Weyburn
Scandia	676	Feb. 27..	19	3	2	V. T. Moller, Ohlen
Willow Brook . .	681	Mar. 14..	26	7	2	Phillip Duff, Willow Brook
Clarilaw	685	Apr. 11..	7	5	2	C. Hildebrand, Hildebrand
Albert	689	Mar. 12..	16, 17	9	2	Edith Ellis, Wolseley
New Hope	691	Mar. 11..	8, 9	8	2	D. Donnelly, New Hope
Greenbank	692	Mar. 11..	11, 12	33	1	A. McVicar, Riga
Look Out	693	Mar. 11..	25	6	2	J. P. Wildie, Yorkton
Holme Lake . . .	695	Mar. 14..	5, 6	7	2	Frank Gendreau, Estevan
Plain View	696	Mar. 8..	24, 25	7	2	G. B. Young, Willow Brook
Cornwall	698	Mar. 22..	21	19	2	P. D. Stewart, Fairy Hill
Beautiful Plains	699	May 1..	10, 11	17	2	Thos. Murray, Yellow Grass
Woolchester . . .	703	May 26..	10, 11	5	4	Jas. Salmond, Woolchester
Blumenfeld	705	May 30..	14, 15	15	2	Peter Junker, Jr., Bulyea
Winnetka	706	June 5..	19, 20	17	2	E. Day Wilson, Hednesford
Cavalier	709	June 12..	7, 8	7	2	John Peterson, Alma
Craven	710	June 12..	20	20	2	L. H. Hoskins, Craven
Pense	712	June 23..	17	22	2	Thos. Wilkinson, Pense
Elim	713	July 9..	16, 17	30	1	Jas. Minty, Ferndale
Lothian	714	July 9..	25, 26	1	2	Angus McLeod, Dunleath
Grunert	715	July 10..	27	5	2	John G. Stephens, Yorkton
Speier	726	Aug. 20..	15, 16	15	2	H. Selinger, Kronau
St. Louis	728	Aug. 22..	5, 6	34	1	E. Gauthier, Manor
Petersburg	729	Aug. 23..	18, 19	16	2	H. Gutheridge, Balgonie
Weyburn Plains	731	Aug. 26..	7	15	2	Clayton Morden, Weyburn
Moose Creek . . .	732	Sept. 8..	6, 7	2	2	John Hewitt, Carlyle
La Salette	734	Sept. 8..	8, 9	7	2	Jerry Foy, Alma
Ossa	744	Oct. 21..	6, 7	7	2	J. A. Saunderson, Coteau
Bavelaw	747	Oct. 21..	19	30	1	F. H. Blucke, Millwood, Man
Seymour	751	Oct. 29..	3, 4	31	1	W. A. Cowan, Gainsboro
Sunny Hill	757	Nov. 14..	14, 15	24	2	Adam Turnbull, Moose Jaw
Redpath	763	Nov. 28..	20	32	1	E. W. Putland, Red Path
Short Creek . . .	768	Dec. 22..	1	6	2	Albert Walberg, Coalfields

SCHOOL DISTRICTS ERECTED, 1902.

Alberta.

NAME.	NO.	DATE OF ERECTION.	GENERAL LOCATION.			SECRETARY.
			Tp.	Rg.	M	
Concord	658	Jan. 9..	41, 42	24	4	G. Malchow, Ponoka
Little Beaver . .	659	Jan 9	44	20	4	H. S. Djuve, Edberg
Good Hope	660	Jan. 14..	54	20	4	G. W. E. Hohme, Bruederheim
Kansas Ridge . .	661	Jan. 14..	+2, 43	2	5	A. O. Young, Lacombe
Pleasant View . .	663	Jan. 15..	54, 55	21	4	D. Simmons, Ft. Saskat'wan
Dakota	665	Jan. 31..	43, 44	27	4	E. R. Olmstead, Ponoka
Sharp Head	667	Feb. 8..	42, 43	26	4	T. W. Hutchinson, Ponoka
East Side	668	Feb. 10..	42, 43	24	4	J. T. Eakin, Ponoka
Grand Meadow . .	671	Feb. 13..	42, 43	26	4	S. L. Carson, Ponoka
Baldenstein	677	Feb. 27..	47	20	4	Chas. Johnson, Bittern Lake
White	678	Mar. 7..	7, 8	21	4	G. J. C. White, Lethbridge
Wiesental	679	Mar. 7..	48	25	4	August Biebrick, Saron
Hammer	680	Mar. 7..	32, 33	28	4	W. H. Hammer, Olds
Independence . . .	683	Mar. 24	56, 57	27	4	P. B. Sawyer, Riviere Qui Barre
Waskasoo	686	Mar. 24.	37, 38	27	4	J. H. Smith, Red Deer
Oxford	687	Mar. 26.	40	1	5	Jas. D. Nurray, Bentley
Daresbury	690	Apr. 7..	45, 46	19	4	W. S. Carter, Duhamel
Beazer	694	Apr. 14.	1, 2	26	4	Jas. Prince, Leavitt
Horse Shoe Lake	697	Apr. 16.	34	27	4	John Haddon, Innisfail
Raymond	700	May 1..	6	20	4	Jos. Bevan, Raymond
Enterprise	701	May 14.	40	24	4	A. W. Joslyn, Lacombe
Hillside	702	May 26.	47	25	4	M. J. Howes, Millet
Coburn	704	May 30.	32	29	4	O. J. Fisher, Olds
Birch Lake	707	June 12.	41	25	4	H. J. Pope, Lacombe
Coal Lake	711	June 13.	47, 48	23	4	Chas. Erickson, Millet
Mansfeld	716	July 16.	54, 55	20	4	B. N. Canning, Beaver Hills
Eureka	717	July 22.	42	23	4	E. E. Owens, Ponoka
Westward Ho . . .	718	July 15.	30, 31	3	5	John Ferg, Didsbury
Saint Eugene . . .	719	July 25.	55, 56	22	4	L. Lepage, Lamoureux
Jordan Hill	720	July 30.	49, 50	25	4	Chas. Mortimer, Leduc
Little Beaver Lake	721	Aug. 7..	43, 44	21	4	Gustof Saffran, Lewisville
Climax	722	Aug. 12.	43	23	4	W. A. Martin, Ponoka
Greenwood	723	Aug. 13.	29	1	5	Sofest Sylvester, Carstairs
Fairwood	725	Aug. 14.	53, 54	14	4	John Bednall, Whitford
Sifton	727	Aug. 20.	46	20	4	Edward Sawers, Duhamel
Nanton	730	Aug. 26.	16	28	4	A. A. Shaw, Nanton
Samis	733	Sept. 8..	33	1	5	J. J. Jensen, Olds
May City	735	Sept. 8..	33, 34	27	4	Amos Brudaker, Mayton
Medicine Valley	736	Sept. 8..	38	2	5	M. Leckvold, Burnt Lake
Grand Forks	737	Sept. 8..	48, 49	18	4	Martin Eid, Northern
Trout Creek	738	Sept 8..	12	27	4	S. L. Lee, Claresholm
Melville	739	Sept. 8..	44	18	4	Geo. Bowie, Duhamel
Clearwater	740	Sept. 9..	50	24	4	Wm. Heatley, Beaumont
Beaumont	741	Sept. 9..	50	24	4	Zeno Roberge, Beaumont

SCHOOL DISTRICTS ERECTED, 1902.

Alberta.—Continued.

NAME.	NO.	DATE OF ERECTION.	GENERAL LOCATION.			SECRETARY.
			Tp.	Rg.	M	
Magic.....	742	Sept. 25.	42, 43	24	4	Wm. M. James, Ponoka
Mayton.....	743	Oct. 2..	32, 33	27	4	J. W. Curtice, Mayton
Schneiderville...	745	Oct. 21..	44, 45	18	4	G. W. Sutherland, Wetaskiwin
White Whale ..	746	Oct. 21..	51, 52	2	5	S. H. Anning, Stony Plain
Angus Ridge...	748	Oct. 22..	44, 45	23	4	J. W. Bailey, Wetaskiwin
Coronation	749	Oct. 24..	54	23	4	A. J. Trounson, Edmonton
Willowflat.....	750	Oct. 30..	49	19	4	S. S. Shirett, Northern
Crossfield.....	752	Oct. 30..	28, 29	1	5	Jas. McCool, Airdrie
West Union....	753	Nov. 5..	43, 49	25	4	O. P. Klein, Leduc
Mound Lake....	754	Nov. 5..	38	23	4	N. Hartman, Hillstown
Kuusamo.....	755	Nov. 13.	39	1	5	J. W. W. Slack, Burnt Lake
Sunny Slope....	756	Nov. 14.	39	2	5	M. B. Clemens, Carstairs
Aspelund.....	758	Nov. 15.	39	28	5	E. A. Wigmore, Blackfalds
Friedensaw....	761	Nov. 27.	31	27	4	Abraham Duck, Didsbury
Stuart.....	762	Nov. 28.	31, 32	26	4	O. S. Waterman, Olds
Claresholm....	764	Dec. 2..	12, 13	26	4	Eric Moffatt, Claresholm
Calder.....	766	Dec. 23.	35	26	4	H. A. Shelley, Knee Hill Valley
Hazel Hill	767	Dec. 23..	43	25	1	E. C. Bennett, Ponoka
Grassy Lakes ..	770	Dec. 30..	36, 37	25	4	F. B. Harrison, Edwell
Premier.....	771	Dec. 30..	43	21	4	A. Horte, Edberg
Poplar Ridge...	772	Dec. 30..	38, 39	28	4	Wm. Stewart, Red Deer
Silver Creek...	773	Dec. 30..	45, 46	20	4	W. E. Crumrine, Duhamel
Sturgeon Valley	774	Dec. 29..	56, 57	23	4	H. Astley, New Lunnon
The Buttes	775	Dec. 31..	25, 26	28	4	Jos. Tyas, Calgary

Saskatchewan.

Brotherfield ...	669	Feb. 10..	42	5	3	I. J. Toertzen, Rosthern
Shannonville ..	672	Feb. 27..	46, 47	21	2	T. M. Shannon, Weldon
Gideon.....	682	Mar. 14.	36, 37	6	3	W. H. Richards, Saskatoon
Grand Rapids..	684	Mar. 24.	48	14	1	J. J. Cochrane, Grand Rapids
Floral.....	688	Apr. 1..	35, 36	4	3	R. Maule, Nutana
Evansvale ..	708	June 12.	36, 37	4	3	John Evans, Nutana
New Home....	724	Aug. 14.	40, 41	5	3	H. E. Penner, Hague
Hague.....	759	Nov. 15.	40, 41	3	3	Heinrich Vogt, Hague
Mountain Lake.	760	Nov. 20.	39	6	3	John Buhler, Lake Park
Crompton....	765	Dec. 12..	44, 45	21	2	Robt. C. Grundy, Kinistino
Diova.....	769	Dec. 30..	36	7	3	R. M. Carl, Saskatoon

APPENDIX L.

EXAMINATIONS, 1902.

PUBLIC SCHOOL LEAVING.

*Literature.**Time—Two and one half hours.*

A.

"'Tis not because Lord Lindesay's heir
To-night at Roslin leads the ball,
But that my ladye-mother there
Sits lonely in her castle-hall.

'Tis not because the ring they ride, 5
And Lindesay at the ring rides well,
But that my sire the wine will chide
If 'tis not filled by Rosabelle."

O'er Roslin all that dreary night
A wondrous blaze was seen to gleam, 10
'Twas broader than the watch-fire's light
And redder than the bright moonbean.

It glared on Roslin's castled rock,
It ruddied all the copse-wood glen;
'Twas seen from Dryden's groves of oak; 15
And seen from caverned Hawthornden.

Seemed all on fire that chapel proud
Where Roslin's chiefs uncoffined lie,
Each baron, for a sable shroud,
Sheath'd in his iron panoply. 20

1. (a) Who is the speaker in the first two stanzas, and to whom are the words addressed?

(b) What were the circumstances that gave rise to this speech?

(c) What is the speaker's probable motive in these first two stanzas?

(d) Explain clearly the meaning of the following: "leads the ball" (l. 2), "ring they ride" (l. 5), "wine will chide" (l. 7), "watch-fire's light" (l. 11), "castled rock" (l. 13), "uncoffined lie" (l. 18), "iron panoply" (l. 20).

(e) Justify the appropriateness of these words as used in the extract—dreary, glared, ruddied, caverned, sable.

2. (a) Account for the form "ladye-mother." Name any other words in the extract similarly used.

(b) Briefly tell the circumstances under which this poem was written.

3. Within the space of half a page give a character sketch of Maud Muller.

4 "And lo! among the menials, a mock state
Upon a piebald steed, with shambling gait,
His cloak of foxtails flapping in the wind,
The solemn ape demurely perched behind,
King Robert rode, making huge merriment
In all the country towns through which they went."

(a) Explain why King Robert went upon this journey.

(b) Account for his appearance.

(c) Briefly tell the outcome.

(d) Explain:—menials, mock state, shambling gait, piebald steed.

B

5. "The fondness for rural life among the higher classes of the English has had a great and salutary effect upon the national character. I do not know of a finer race of men than the English gentlemen."

(a) What is the title of the lesson from which this extract is taken? Who is the author?

(b) Give in your own words the substance of either (a) the effect of rural life in England upon the "extremes" of society; or (b) the reasons for the popularity of the nobility among the peasant classes.

6. "As we were regarding very attentively this confusion of miseries, this chaos of calamity, Jupiter issued out a second proclamation that every one was now at liberty to exchange his affliction and to return to his habitation with any such other bundle as should be delivered to him. Upon this Fancy began again to bestir herself and, parcelling out the whole heap with incredible activity, recommended to every one his particular packet."

(a) Explain why the author makes use of the term "confusion of miseries."

(b) How is Fancy represented? Compare her with Patience.

(c) Give one of the "observations" made as a result of the second proclamation.

(d) State some of the lessons learned as a result of the Vision.

C.

7. Indicate the connection of the following extracts:

(a) "For, after all, the best thing one can do
When it is raining is to let it rain."

(b) "Yet himself could make
The thing that is not, as the thing that is."

(c) "Proud as the proudest moves she among them;
Well is she worthy a noble song."

(d) "He gives nothing but worthless gold
Who gives from a sense of duty."

(e) "How'er it be it seems to me
'Tis only noble to be good."

D.

8. Quote any sixteen consecutive lines from any *one* of the following :
- The Brook.
 - Lady Clara Vere de Vere.
 - Thanatopsis.

Grammar.

Time—Two hours.

- Then, with eyes that saw not, I kissed her ;
And she, kissing back, could not know
That my kiss was given to her sister
Folded close under deepening snow.
 - Classify this sentence, giving reasons.
 - Give the construction of each clause.
 - Give the construction of each phrase.
 - Parse *that* (line 1) and *that* (line 3); *her* (line 1) and *her* (line 3); *kissing* (line 2), *deepening* (line 4) and *folded* (line 4).
 - Give the different kind of objective relations to be found in this sentence.
 - Classify the verbs in this sentence as notional or relational, old or new conjugation, active or passive.
- Construct sentences illustrating the uses of the adjectives *pretty* and *handsome* in the comparative degree; the conjunction *but* connecting phrases; the word *well* as a noun, as an adverb, as a verb.
- Construct an assertive sentence to describe the *sun* and containing adjectives used attributively and predicatively. Show how these adjectives differ in use.
- Construct sentences to show (a) an adjective, (b) an adverb, (c) a phrase, used as a substitute for a noun.
- State and illustrate the difference between prepositions and conjunctions as connecting words.
- Write the first person singular present indefinite, present imperfect, present perfect, of the verb *walk*. Show clearly how these three differ in meaning.
- Write two sentences, one in the active, the other in the passive, telling some fact. What advantage, if any, has one form over the other ?

Composition.

Time—Two hours.

John McLaren, of Percy, Assiniboia, replies to Jonathan Yankton's letter of June 22nd. He tells him that he will sell the south half of Section 3 of Range 5 Township 9 west of the second Meridian at eighteen dollars an acre. Half the price is to be cash, the balance to be paid in four years at six per cent. interest. He wishes an immediate reply, as there is an active demand for farm land at Moose Mountain. He will

sell the south-east quarter at an advance of two dollars an acre over the price of the half-section. This quarter is all choice land.

1. Write Mr. McLaren's letter and rule a space to show how you would address the envelope to Winona, Wisconsin.

2. Write an imaginary conversation between a friend and yourself on *one* of the following subjects:—A game you have just seen; a picnic, a fair, a hunt, or a trip to town you have both had; the life work you would like to follow; how we spent Arbor Day, 1902 (Do not use your own name.)

3. Write a paragraph that shall be an expansion of the thought contained in any *one* of the following sentences:—

(a) It was a beautiful spring morning.

(b) The scenery around the school house was grand and imposing.

(c) Every drop of water that falls upon the land finds its way sooner or later to the sea.

4. Write in a sentence the substance of the following:

“All day the low hung clouds have dropped
Their garnered fullness down;
All day that soft gray mist hath wrapped
Hill, valley, grove and town.
There has not been a sound to-day
To break the calm of nature:
Nor motion, I might almost say,
Of life or living creature;
Of waving bough, or warbling bird,
Or cattle faintly lowing;
I could have half believed I heard
The leaves and blossoms growing.”

5. Paraphrase the following:

“The leper raised not the gold from the dust:
Better to me the poor man's crust,
Better the blessing of the poor
Though I turn me empty from his door;
That is no true alms which the hand can hold;
He gives nothing but worthless gold
Who gives from a sense of duty;
But he who gives a slender mite
And gives to that which is out of sight
That thread of the all-sustaining beauty
Which runs through all and doth all unite,—
The hand cannot clasp the whole of his alms,
The heart outstretches its eager palms,
For a god goes with it and makes it store
To the soul that was starving in the darkness before.”

Arithmetic and Mensuration.

Time—Two hours.

1. A man exchanged 638,040 lbs. wheat worth $48\frac{1}{2}$ cents a bushel, 9,037 lbs. oats worth 19 cents a bushel and 7,391 lbs. barley worth 48

cents a bushel for potatoes worth 49 cents a bushel; how many bushels of potatoes did he receive?

2. What is meant by "per cent."? What is the percentage of attendance in a school having an enrolment of 59 pupils and school being open 20 days, there being 3 pupils absent 3 days each, 2 pupils absent 5 days each and one pupil absent $10\frac{1}{2}$ days?

3. Which is the more nearly correct and by how much?

$$(a) \frac{10}{9,009} = 1.11; \text{ or } (b) \frac{10}{1.11} = 9.009?$$

4. A school district is 4 miles wide and 5 miles long and wishes to raise \$487.50 in taxes. If there are 5 quarter sections free from taxation what is the tax rate per acre?

5. An agent sold cotton amounting to \$6,398.53 and collected a commission of $2\frac{1}{2}$ per cent. He invested the net proceeds in dry goods after deducting his commission of $1\frac{1}{2}$ per cent. on amount so expended. Find his total commission.

6. A man sold oxen at \$28 each, cows at \$17 each and sheep at \$7.50 each and received \$749 for the lot. There were twice as many cows as oxen and three times as many sheep as cows. How many of each kind were there?

7. Diamond shaped panes of glass with diagonals 12 inches and 16 inches are grouped to form a diamond shaped window having an area of 600 square feet. If glazing 9 feet requires one pound of lead what will be the weight of lead required to glaze the edges of the panes of glass used?

8. A plate of metal $3\frac{1}{2}$ inches thick and 21 feet long is rolled to form a hollow cylinder having an outer circumference of 3 feet 8 inches. What will it cost to paint its lateral surfaces at 15 cents a square foot?

Algebra and Geometry.

Note—Candidates must obtain at least 34 per cent. on each section.

Time—Three hours.

1. (a) Define the following and illustrate each by an example:—
Numerical coefficient, like terms, binominal factor.

(b) When is one quantity a said to be greater than another quantity b ?

2. Multiply together $a^2 + ax + x^2$, $a + x$, $a^2 - ax + x^2$, $a - x$, and divide the product by $a^3 - x^3$.

3. Resolve into elementary factors:—

$$(a) a^6 - b^6. \quad (b) a^4 + a^2b^2 + b^4. \quad (c) ab^2 - bd + cd - abc.$$

4. Solve the equations:

$$(a) \frac{3x+4}{5} - \frac{7x-3}{2} = \frac{x-16}{4}$$

$$(b) \frac{5}{6}(x - \frac{1}{5}) - \frac{7}{6}\frac{1}{7} - \frac{x}{5} = 4\frac{2}{3}$$

$$(c) x + 1 - \frac{x^2 + 3}{x + 2} = 2$$

5. Find the L.C.M. of $x^3 + 1$ and $x^2 + x - 2$
6. Find two numbers differing by 8 such that four times the less may exceed twice the greater by 10.
7. A person bought oranges at the rate of 36 cents a dozen ; had he received 6 more for the same money they would have cost him 6 cents a dozen less. How many did he buy ?

B

Note—Instruments—ruler, protractor and compass. Accuracy of drawing is required in construction. All construction lines to be left.

8. (a) Define and illustrate by drawings the following:—chord, straight angle, adjacent angles.
 (b) Show how to divide a given straight line into any number of equal parts.
9. (a) Upon what does the magnitude of an angle depend ?
 (b) At a given point construct an angle equal to a given angle. (Do not use protractor.)
10. (a) Define hypotenuse, angle of elevation.
 (b) When are triangles equivalent? When similar? When equal?
 (c) Construct a triangle having given two sides and the included angle. How may this knowledge be applied in the construction of machines ?
11. Prove that a perpendicular is the shortest distance from a point to a straight line.
12. (a) Classify parallelograms.
 (b) Show how to construct a parallelogram, having given two adjacent sides and the included angle.
13. (a) Define tangent.
 (b) Draw a tangent to a given circle through a given point. Let the point be outside the given circle.
14. If the radius of a circle is 4 ft. 8 in., what is the perimeter of a sector whose angle is 45 degrees ?

Geography.

Time—One and three quarter hours.

1. (a) Draw an outline map of that part of North America north of the United States.
 (b) Mark the water partings of the three great basins in the eastern slope.
 (c) Show the river system of the Nelson basin.
 (d) Locate the two great commercial centres of this basin and account for their development.

2. (a) State the elementary causes of Trade Winds.
- (b) State their influence upon the climate of Europe, Northern Africa and Australia.
3. In South America select districts of much rain and of little or no rain. Give reasons.
4. Compare the great North American plain with the great Asiatic plain :
 - (a) As to climate ;
 - (b) As to fertility ;
 - (c) As to favourable position for industrial progress.
5. Name the chief exports of Newfoundland, New Zealand, British Columbia, Ceylon, Rio Janiero, Liverpool.
6. Write a note on any two of the following : The trade and commerce of Fort William ; Boy Life in Holland ; A coffee plantation in Brazil ; A trip down the lower Mississippi ; The industries at Glasgow ; A day at the Canadian Sault St. Marie.
7. Locate and state the importance of each of the following : Trinidad, St. Helena, Sault St. Marie, Sandyhook, Pittsburg, Sheffield, Vancouver, Durban, Bermudas, Rat Portage.

History.

Time—Two hours.

1. Give a short sketch of Champlain's work in Canada.
2. Compare the Government of Canada under Military Rule with that under the Quebec Act. Which system was the better adapted to conditions of the country ? Why ?
3. Outline the campaign of 1813. Draw a map to show the routes taken by the American forces and the location of the principal engagements.
4. "The Parliament of Canada consists of three branches." Name them and give a brief summary of the powers of each.
5. Write a short note on the Saxons at the time of their invasion of Britain under the following heads : Social, religious, political.
6. Show how the Wars of the Roses affected the different classes of the English people.
7. State somewhat fully the causes that led to the outbreak of hostilities between the King and the Parliament in the Stuart Period.
8. Sketch briefly the growth of the Empire in the Brunswick Period.

Nature Study and Agriculture.

Time—Two hours.

1. (a) What natural conditions are necessary to promote the germination and the growth of plants ?

(b) What would be the particular effect upon the plant due to the absence of each of these conditions ?

2. (a) Compare the methods of locomotion in the gopher, rabbit, snake, duck and prairie chicken.

(b) Show in a general way the adaptation of their forms and structure to their modes of life.

3. (a) State the purposes of covering to animals.

(b) How does latitude affect these coverings ?

(c) Why do animals change their coverings ?

4. How does shape, position, colour and odor of fruits each help in the distribution of seed ? Give examples to illustrate your answer.

5. (a) What are noxious weeds ?

(b) What is their effect upon (i) soil ; (ii) crops ?

(c) Name four noxious weeds growing in the North-West Territories and outline a method for cleansing a field infested with couch grass.

6. Describe the appearance and purpose of the flower parts of the anemone. By drawings illustrate their relative positions.

7. (a) Compare the methods of preparing soil for a crop of (i) potatoes ; (ii) oats.

(b) Give reasons for any difference in such preparations.

8. (a) What is meant by soil ?

(b) Upon what depends its richness ?

(c) How does lack of drainage affect the productivity of the soil ?

9. Compare the purpose of colour in bird plumage with colour in flowers.

Hygiene and Temperance.

Time—One and one-half hours.

1. (a) What is the purpose of the blood in the human body ?

(b) Give an outline description of its circulation.

2. (a) What is the function of the lungs ? (b) How is this done ?

3. Write notes on :

(a) The necessity for a constant supply of pure air.

(b) The advantages arising from cleanliness of body.

(c) The care of the eye in the school room.

4. (a) In case of an outbreak of scarlet fever in a household what steps should be at once taken to prevent the spread of the disease ?

(b) Describe the precautions to be taken in and about the bedroom of the patient ?

5. Describe the effects of the habitual use of alcohol upon :

(a) The digestive organs.

(b) The nervous system.

(c) The moral nature.

6. Write ten lines on : "The use of tobacco by young people."

*Spelling and Orthoepy.**Time—One hour.*

1. Write the passage dictated by the presiding examiner: "New Canadian Reader," Book V, page 112. "With courage . . . those guns."

(*This is not to be seen by the candidates. It is to be read to them three times—the first time to enable them to grasp the meaning, the second time to enable them to write the words, the third time for review. Candidates are not permitted to re-write the passage.*)

2. Divide the following words into syllables and mark the accent: Increment, incubator, Para, Yosemite, inexorable, industry, industrial, Constantinople, orchestra, purification.

3. Write sentences showing clearly the difference in meaning between:—Teach, learn; lose, loose; transpire, happen; Can I? May I?

4. Form at least two words from each of the following primitives by the addition of prefixes or suffixes, or of both, and give in each case the force of the additions: Duck, king, laugh, meter, sphere.

5. Distinguish abbreviations and contractions and give four examples of each.

*Drawing.**Time—One and one-half hours.*

1. Draw the front and right end views of a horizontal cylinder.

2. Make a working drawing of a wooden box three feet long, two feet wide and one and one-half feet high. Lumber one inch thick. Scale an inch to a foot.

3. Sketch the door-way of the school room with the door open at an angle of forty-five degrees.

4. Sketch a cube and cylinder placed below the level of the eye, the cube to the left and a little in front of the cylinder. (Models may be used.)

5. Draw a pint measure—say three inches high—showing handle at the right side.

6. Make drawings to represent (*a*) three stages in the germination of a bean; (*b*) half a carrot cut from top to point of root, showing direction of fibres and position of root hairs; (*c*) the leg and foot of a hen or the bill and foot of a hawk.

DEPARTMENT OF EDUCATION
TEACHERS' EXAMINATIONS.

NON-PROFESSIONAL.

THIRD CLASS.

Poetical Literature.

Time—Three hours.

1. " Ah, miserable and unkind, untrue,
Unknightly, traitor-hearted ! Woe is me !
Authority forgets a dying king
Laid widow'd of the power in his eye
That bow'd the will. I see thee what thou art,
For thou the latest-left of all my knights
In whom should meet the offices of all,
Thou wouldst betray me for the precious hilt :
Either from lust of gold or like a girl
Valuing the giddy pleasure of the eyes."

(a) Briefly outline the circumstances that occasioned this speech of King Arthur's.

(b) Tell the effect of his words upon Sir Bedivere.

(c) Explain the thought contained in ll. 3 5 [" Authority—will "] and in ll. 6-7 [" the latest-left—offices of all "].

(d) Give the substance of Arthur's remarks from the barge making use of quotations where you can.

2. (a) My own dim life should teach me this,
That life shall live forever more,
Else earth is darkness at the core
And dust and ashes all that is.

(b) For wisdom dealt with mortal powers,
Where truth in closest words shall fail,
When truth embodied in a tale
Shall enter in at lowly doors.

Express with clearness and accuracy the thoughts contained in the above passages.

3. (a) *Darkling* I listen ; and for many a time
I have been half in love with easeful death,
Call'd him soft names in many a *mused rhyme*
To take into the air my quiet breath ;
Now more than ever *seems it rich to die*,
To cease upon the midnight with no pain,
While thou art pouring forth thy soul abroad
In such an ecstasy !
Still wouldst thou sing, and *I have ears in vain—*
To thy high requiem become a sod.

(b) And I can listen to thee yet,
Can lie upon the plain
And listen till I do *beget*
The golden time again.

(c) What thou art we know not :
What is most like thee ?
From rainbow clouds there flow not
Drops so bright to see
As from thy presence *showers a rain of melody.*

(i) From what lessons are the above extracts taken? Name the author of each.

(ii) From a brief analysis show how each is characteristic of the author.

(iii) Explain briefly and clearly the italicised portions.

(iv) Quote at least two stanzas in which the poet endeavours to portray the "likeness" asked for in 3 (e), line 2.

4. The naked hulk alongside came,
 And the twain were casting dice;
 "The game is done! I've won! I've won!"
 Quoth she, and whistles thrice.
 The sun's rim dips; the stars rush out:
 At one stride comes the dark;
 With far heard whisper o'er the sea,
 Off shot the spectre-bark.
 We listened and looked sideways up!
 Fear at my heart, as at a cup,
 My life-blood seemed to sip!
 The stars were dim, and thick the night;
 The steersman's face by his lamp gleamed white;
 From the sails the dew did drip—
 Till clomb above the eastern bar
 The horned Moon, with one bright star
 Within the nether tip.

(a) Indicate accurately at what stage in the poem the above stanzas are introduced.

(b) Describe the approach of the "naked hulk" from the time the Mariner beheld it as a "something in the sky."

(c) Who is the speaker in line 3? Quote the description of her. How is her winning to affect the ancient Mariner?

(d) Explain the phenomena mentioned in lines 5-6.

(e) Write notes upon:—"looked sideways up," "within the nether tip."

(f) "as at a cup." Develop the simile.

5. (a) From what lessons are the following extracts taken:

(i) And oft *when in my heart was heard*

Thy timely mandate, I deferred

The task, in smoother walks to stray.

(ii) *More than is of man's degree*

Must be with us, watching here

At this one great solemnity.

(iii) I am *that man upon whose head*

They fix the price because I hate

The Austrians over us.

(iv) Our sincerest laughter

With some pain is fraught;

Our sweetest songs are those that tell of saddest thought.

(b) Explain in general the meaning of each of the above passages with special reference to the italicised parts.

6. Quote sixteen consecutive lines from any *one* of the following:—

(a) The Ancient Mariner

(b) The Passing of Arthur.

(c) The Death of Wellington.

Prose Literature (Talisman).

Time—Two and one-half hours.

1. What is the use of the first chapter ?
2. What contributions to the progress of the plot are made by the visit of Kenneth to the chapel at Engaddi ?
3. What part is played by Philip of France in the development of the plot ?
4. Who is the real hero of this novel ? On what principle do you base your answer ?
5. Write a character sketch of Edith and account for any changes you may have noticed in her.
6. Criticise Scott's use of disguise in working out the plot, referring to instances in support of your view.
7. Give illustrations of Scott's use of Nemesis in this novel.
8. Which attributes of human character has Scott pictured most strongly in this novel ? Give illustrations.
9. Comment upon the historical accuracy of this sketch of the Third Crusade.

Grammar and Rhetoric.

A

Time—Two hours.

1. Sir, if you knew her in her English days,
My mother, as it seems you did—the days
That most she loves to talk of— come with me.
Analyse the above sentence so to show the various clauses (principal and subordinate) which it contains, and indicate their relations to one another. In the case of subordinate clauses be careful to state the grammatical function of each, and to point out the particular word or words each one modifies.
2. Classify, with reasons, each of the nouns in the following passage, as (a) concrete or abstract ; (b) common or proper ; (c) collective or individual :

Tho' Power should make from land to land
The name of Britain's trebly great—
Tho' every channel of the State
Should fill and choke with golden sand.
3. "The adjective may merely mark out, or merely express a quality of, the thing the noun stands for, or it may both mark out and express a quality."
 Illustrate this by showing how the adjectives in italics affect the meaning of the nouns they belong to :

Full *many a glorious* morning have I seen
Flatter the mountain tops with *sovereign* eye,
Kissing with *golden* face the meadows *green*,
Gliding *pale* streams with *heavenly* alchemy.

4. (a) How does *should* differ from *ought* when both denote obligation? Illustrate.

(b) Distinguish as to meaning and form the root-infinitive, gerundial infinitive and gerund. Illustrate.

(c) What is the tense of the verb in "*He had been driving*"? From the standpoint of inflection give the special functions of each word in italics.

5. It is raining consequently I cannot go.

I went because he came.

State the relation of the second clause to the first in each sentence, and hence the name and sub-class of the connecting word.

6. Form words from each of the following primitives by the addition of prefixes or suffixes, or of both; state how each addition affects the meaning: warm, real, nature, speak.

B.

1. "Just beyond Helen Crag opens one of the sweetest landscapes that art ever attempted to imitate. The bosom of the mountains, spreading here into a broad basin, discovers in the midst Grasmere Water; its margin is hollowed into small bays with bold eminences, some of them rocks, some of soft turf that half conceal and vary the figure of the little lake that they command. From the shore a low promontory pushes itself far into the water, and on it stands a white village with the parish church rising in the midst of it; hanging enclosures, corn-fields, and meadows green as an emerald, with their trees, hedges and cattle, fill up the whole space from the edge of the water. Just opposite to you is a large farm house at the bottom of a steep smooth lawn embosomed in old woods, which climb half-way up the mountain side, and discover above them a broken line of crags, that crown the scene. Not a single red tile, no flaring gentleman's house, or garden walls, break in upon the repose of this little unsuspected paradise; but all is peace, rusticity and happy poverty in its neatest and most becoming attire."

1. State the theme of the paragraph.

2. State the method of description somewhat fully.

3. What is the purpose of the first sentence; of the last sentence?

4. What is the predominant quality of this scene?

5. What purpose is served by the introduction of the "farm house"?

6. Discuss the appropriateness of "sweetest," "art ever attempted to imitate," "discovers," "white."

Essays.

Time—One and one-half hours.

Write briefly—say three or four paragraphs—on three subjects selected from the list that follows. It is not the extent of your knowledge about the selected subjects so much as your ability to say a few

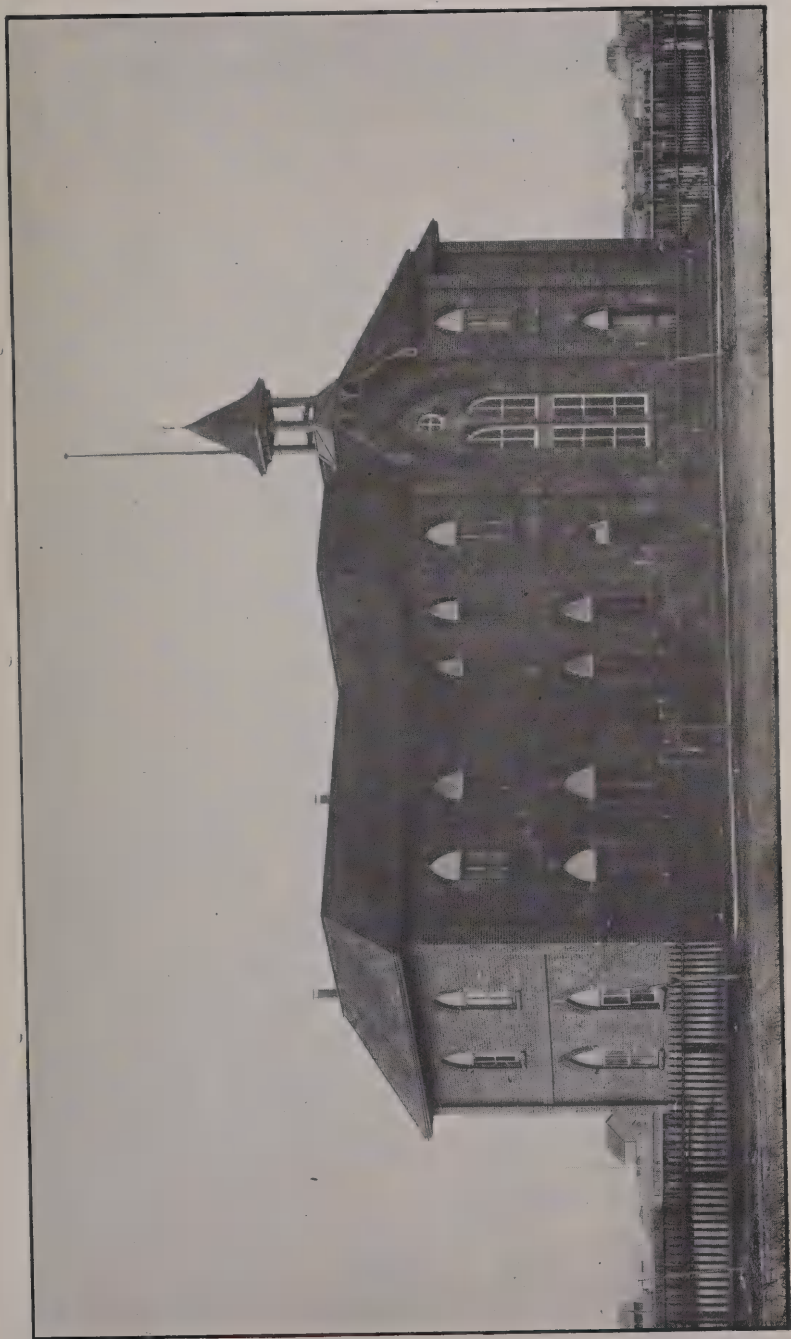
things about them in a simple, clear, orderly and correct way that is the test.

1. One of the following :
 - (a) Description of the contest between the Knight of the Leopard and the Saracen.
 - (b) Berengaria, Queen-Consort.
 - (c) Saladin.
2. Either of the following :
 - (a) Give briefly in narrative form Saladin's account to Richard of his reasons for slaying the Grand Master.
 - (b) The substance, in narrative form, of the conversation between Richard and Edith Plantagenet as to the answer to be returned to Saladin's letter.
3. Either of the following :
 - (a) Discuss: "Keep faith when you have made any covenant, even if it be to your own harm."
 - (b) Discuss: "Yet and but, said the Templar, are but words for fools; wise men neither hesitate nor retract; they resolve and they execute."

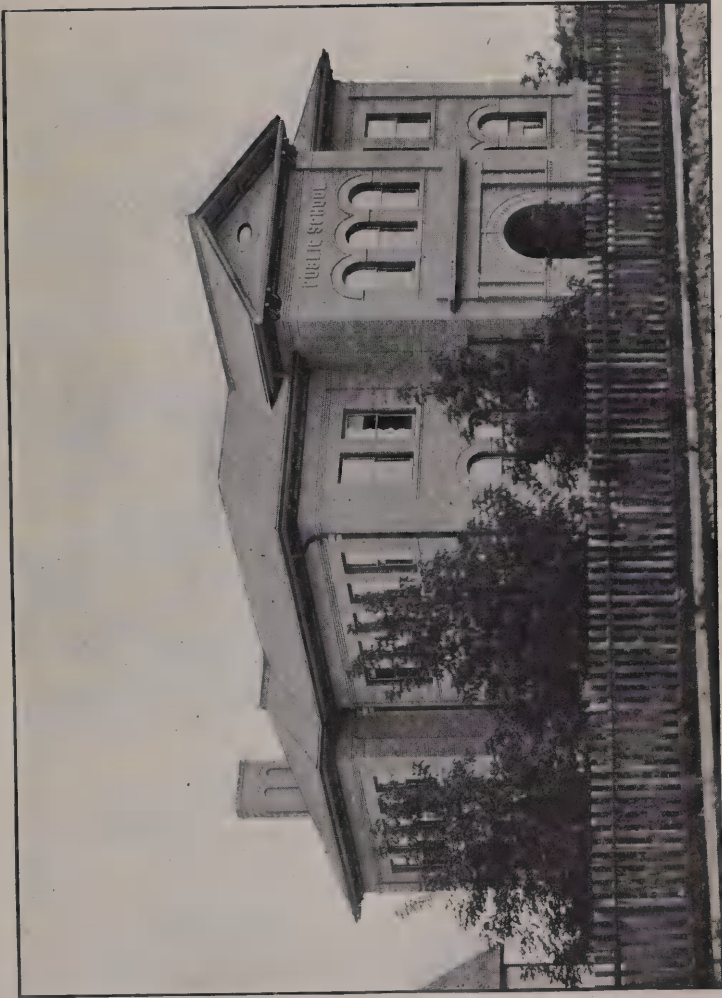
Arithmetic and Mensuration.

Time—Three hours.

1. Two men agree to do a piece of work for \$4.20. One man could do the work alone in 6 days the other in 7 days. With the assistance of a boy they complete the work in 3 days. How should the money be divided?
2. A grocer professes to retail a certain tea at 20 per cent. profit but he mixes with it $\frac{1}{4}$ of its weight of an inferior tea which costs him only $\frac{2}{3}$ of the price he pays for the better grade. What rate per cent. does he really make?
3. (a) What number is the same part of 95.9 that 18.27 is of 29?
 (b) The lowest common multiple of two numbers is 10140, their highest common factor is 13, one of the numbers is 78, find the other.
4. The streets of a city have an area of 8 q k m. In a snow storm the average depth of snow was 25 cm. Assuming 12 c cm of snow to produce 1 c cm of water, find the volume in litres of the water produced and also its metric weight.
5. A room whose height is 12 feet and its length $1\frac{1}{6}$ times its width takes $178\frac{2}{3}$ yards of paper 1 ft. 9 ins. wide to cover its walls. What will it cost to carpet its floor with carpet 30 inches wide and costing \$1.15 per yard, the strips run lengthwise and 3 inches per strip is wasted in matching?
6. A man buys a horse upon borrowed money and pays 6 per cent. per annum. The horse earns 70 c.nts daily and costs $\frac{1}{2}$ per cent. daily upon its purchase price for keeping. At the end of the year the owner sells it for \$50 and realises \$132.40 upon the whole transaction. What did the horse cost? (1 year = 365 days.)



PUBLIC SCHOOL, LETHBRIDGE, ALTA.



PUBLIC SCHOOL, MOOSOMIN, ASSA.

7. A fenced square garden has a side 40 feet long. Outside of it and at a distance of 40 feet from each of the two nearest corners a pony is tethered. If the tether rope is 100 feet long find the area over which the pony can graze.

8. If the surface of a sphere is equal to that of the lateral surface of a cylinder and the radius of the base of the cylinder 7 inches and its height 1 foot 2 inches, find the volume of the sphere. If the radius of the base of the cylinder were doubled compare the volumes of the two cylinders.

9. A right angled triangle, the legs of which are 3 inches and 4 inches in length, is made to revolve about the longer side. Find the volume of the body thus outlined.

Algebra.

Time—Three hours.

1. Express algebraically the following :

(a) The square of the sum of any number of algebraical quantities is equal to the sum of their squares together with twice the product of every pair.

(b) Apply this to find the square $a-b+c-d$.

2. Divide the continued product of x^2+ax+a^2 , x^2-ax+a^2 , $x+a$, and $x-a$ by $x^4+a^2x^2+a^4$.

3. Divide $b(x^3-a^3)+ax(x^2-a^2)+a^3(x-a)$ by $(a+b)(x-a)$.

4. (a) Explain the difference between an "identity" and an "equation."

(b) Solve : (1) $x+3+\frac{3(x+3)}{7}=\frac{3(x+3)}{2}-\frac{1}{2}$.

(2) $\frac{2x-5}{5}+\frac{x-3}{2x-15}=\frac{4x-3}{10}-1\frac{1}{10}$.

(3) $\frac{x}{x-2}-\frac{x+1}{x-1}=\frac{x-8}{x-6}-\frac{x-9}{x-7}$

5. (a) Define "simultaneous equations."

(b) Solve : $y-x+z = -5$
 $z-y-x = -25$
 $x+y+z = 35$

6. (a) Define "nominal factors."

(b) Factor :—

(1) $6x^2+7x-3$.

(2) $9a^2+30ab+24b^2$.

(3) $a^2bx+b^2cx-a^2cy-bc^2y$.

7. (a) Find the H.C.F. of $x^3+4x^2-8x+24$, and x^4-x^3+8x-8 .

(b) Find the L.C.M. of x^3-x , x^3-1 and x^3+1 .

8. A man invests one-fourth of his capital at 5 per cent, one-fifth at 4 per cent, and the rest at 3 per cent, and thus secures an annual income of \$3,700. What is his capital?

9. What is the length of the radius of the circle the number of square units of whose area equals the number of linear units of circumference?

10. A boy has a bag of nuts. He gives three more than two-fifths of them to his sister, six more than one-fourth of the remainder to his brother, and eats three-thirteenths of what then remains, and finds he has exactly two-sevenths of his original number left. How many had he at first?

Geometry.

Time—Three hours.

Note—Instruments—ruler, protractor, compass and triangle. Accuracy of drawing is required in construction. All construction lines to be left.
Note—Candidates must obtain at least 34 per cent. on each section.

A.

1. (a) Write a description of a square pyramid.
(b) Show how point, line and surface may be illustrated better by this figure than by pen and paper.
- 2 Illustrate and define dimension, polyhedron, figure, complementary angle, circumscribed polygon.
3. (a) Prove that the angles at the centre of a circle are proportional to the length of the subtending arcs.
(b) Name an instrument used by mathematicians that is based on this principle and show how the principle applies.
4. Two farm houses are 300 yards apart. A school house lies 360 yards from one farm and 510 yards from the other. A well is equidistant from the farm houses and 600 yards from the school.
(a) Draw a diagram, scale 120 yards to an inch, showing the relative positions of each place.
(b) State concisely any theorem used in this construction and prove it.
(c) Take the units in your diagram to be hectometres instead of yards, and find the number of metres between the well and the farms.
5. (a) If the distance of a point from a given circle is equal to the radius of the circle, show how to draw two tangents from this point to the circle.
(b) Join the points where the tangents meet the circle. Determine deductively the magnitude of the angle in the smaller segment cut off.
6. If two straight lines intersect, the vertical angles are equal.
(a) Prove this proposition (1) inductively—according to Hill; (2) deductively—according to Euclid.
(b) Point out the advantages of the one method over the other.

B.

7. (a) Any two angles of a triangle are together less than two right angles. I. 17.
(b) Prove proposition (a) by taking point in the base.

(c) From the conclusion in (a) draw two inferences regarding the angles of a triangle.

8. (a) At a given point in a straight line to make a rectilinear angle equal to a given rectilinear angle. I. 23.

(b) Construct a triangle having given one side, an adjacent angle and the sum of the other two sides.

9. (a) All the exterior angles of a rectilinear figure are together equal to four right angles. I. 32. Cor. 2.

(b) Divide a right angle into five equal parts.

10. (a) Parallelograms on equal bases and between the same parallels are equal to one another. I. 36.

(b) Extend the proof of proposition (a) to any number of parallelograms.

(c) Distinguish "equal" in proposition (a) and "equal" in I. 4.

11. Describe a parallelogram that shall be equal to a given triangle and have one of its angles equal to a given rectilinear angle. I. 42.

Book-Keeping.

Third Class and Second Class. If required.

Time—Two hours.

1.

June 1, 1901, William Smith commenced business investing as follows :
Cash \$1,000. John Thompson owes him on a note payable June 16, \$40 ;
Thomas Robinson holds a note against him for \$60.

June 2 Deposited in bank \$600.

" 3 Bought of Joseph Grant for cash 4 chests tea, 160 lbs. net at 40c.

" 4 Sold P. McGuire on acct., 2 chests tea, 80 lbs. net at 50c.

" 5 Bought for cash 3 bbls. sugar, 750 lbs. net at 8c.

" 7 Bought on note at 60 days from J. McKenzie 40 gallons maple syrup at \$1.20.

" 8 Sold James Cochrane on his note at 30 days, 1 chest tea 40 lbs. at 50c.

" 12 Withdrew for private use cash, \$100.

" 15 Sold James Carter on account 20 gallons maple syrup at \$1.40.

" 16 Paid for office furniture, cash \$40.

" 19 Paid note, favour Thomas Robinson \$60.

" 21 Received from P. McGuire on acct. \$30.

" 23 Prepaid note favour of J. McKenzie, dated June 7th at 60 days.
Face of note \$48. Discount allowed 32c.

" 24 Withdrew from bank \$150.

" 25 Paid one month's rent \$50.

" 26 James Carter pays on acct. \$25.

" 28 Sold for cash 1 bbl. sugar, 250 lbs. at 10c.

Inventories.

40 lbs. tea at 40c.

500 lbs sugar at 8c.

20 gallons syrup at \$1.20.

Office furniture \$40,

1. Transfer these accounts to the Ledger.
2. Make out a statement of Losses and Gains.
3. Make out a statement of Resources and Liabilities.
4. After the Ledger is all posted state what the difference between the debit and credit sides of the following account signifies ; Merchandise, Bills Payable, James Carter, Expense, Discount.
7. Write the document used in withdrawing \$150 from the bank on June 24.
- 8 Write out an advertisement for a clerk. (Do not use your own address.)

Geography

Time—Two hours.

1. The Thames, the Mersey, the Hudson, the St. Lawrence each flow in the lower part of its course through a drowned valley.
 - (a) Explain what is meant by a drowned valley.
 - (b) What are its commercial benefits.
 - (c) Name the great shipping port of each of these rivers.
 - (d) Give a general idea of the nature of the exports and imports at any two of them.
2. (a) Draw an outline map of the British Isles and the continental coast line from the Pyrenees to the Baltic.
 - (b) Locate the following and mention some fact of interest about each : London, Liverpool, Glasgow, Londonderry, Dublin, Belfast, Portsmouth, Calais, Havre, Amsterdam.
 - (c) Name the countries upon this coast line and state the chief physical features, industries and exports of any one of them.
3. The British Isles and the Labrador coast are practically in the same latitude. Account fully for (a) the difference in climate, (b) the difference in rainfall.
- 4 Briefly describe South Africa under the following heads: History and settlement, coast line and harbours, structure, characteristics of the rivers, climate, animal life.
5. Write a sketch of the Nelson basin under the following heads : Physical features, general slope, soil, products, trade routes
6. (a) Draw a plan of Township 5 Range 3 west of the Third Meridian.
 - (b) Subdivide into sections and number them.
 - (c) Mark the school lands and Hudson's Bay lands.
 - (d) State the number and the range of the township south-east of the above township, north of it, north-west of it, east of it, south-west of it.
7. Show by a diagram the position of the Arctic and Antarctic circle.
 - (a) The tropics, the equator.

- (b) Why are these lines drawn at these points?
 (c) Describe the position of the sun on July 1st with reference to each of these lines.
 (d) When will the sun be vertical over the equator?

Canadian and British History.

Time—Two hours.

1. Compare briefly the French and English colonies in America immediately prior to the final struggle between them showing clearly the advantages, from a military point of view, that each possessed.
2. Describe the invasion of Canada by the Congress troops. Why did the French refuse to join the invaders?
3. Since 1763 there has been great development in Canada along educational and industrial lines. Sketch that development.
4. Write a brief note upon North-West Canada prior to 1870.
5. Point out the main social and constitutional changes that took place among the Saxons in England before the Norman Conquest.
6. Trace the growth of freedom during the Norman and Plantagenet period.
7. State the provisions of the Bill of Rights. Why is it called a modern Magna Charta.
8. Who were, in your opinion, the three greatest inventors, philanthropists, poets and statesmen of the Hanoverian Period? Give a short account of the political career of one of the statesmen.

Agriculture and Botany.

Note—The presiding examiner shall deliver all the specimens to one third of the candidates at the beginning of the examination, transfer them to another third at the beginning of the second hour, and to the remaining third at the beginning of the third hour. Candidates are requested not to injure the specimens.
Note—Candidates must obtain at least 34 per cent. on each section.

Time—Three hours.

A

1. (a) Name the chief soil constituents. (b) What are the sources of each. (c) Upon what depend the nutritive properties of soils? (d) How may fertility be restored to exhausted soils?
2. (a) How would you prepare virgin soil for a crop of wheat? State the value of each operation. (b) Compare the yield of a crop of oats from "breaking" and from "summer fallow." Give reasons for any difference.
3. (a) In what ways are the seeds of noxious weeds disseminated?

- (b) Describe the root and seed of the "French Weed" (stink weed).
 (c) How should a field infested with this weed be treated?

4. (a) In what ways are insects and birds (i) hurtful, (ii) beneficial to crops? (b) Name a common insecticide and state the method of application.

5. (a) Sketch the processes in butter making. (b) Name two classes of cattle best adapted for butter making purposes. Give the characteristics of each class.

6. Farms are situated in the North-West Territories (a) on rolling land with slope to the north-west; (b) on level prairie away from any large body of water; (c) on level land in a timbered district; (d) bordering a large lake. Compare, giving reasons, these farms as to danger from (i) frost, (ii) drought.

B.

1. (a) What is a flower? (b) State your method of determining the identity of a flower. (c) How would you detect flower relationships?

2. (a) Distinguish hypogynous, epigynous and perigynous flowers. Give drawings to illustrate each. (b) How is pollination effected in each case?

3. (a) When are the buds formed on the poplar and the willow? (b) How are these protected until time of unfolding? (c) Show that all buds cannot develop into branches.

4. (a) Compare the methods of support in the stems of the pea, strawberry and clematis. (b) What are the uses of branches? (c) State the relations that existed between the spread of branches and the shape and arrangement of the leaves.

5. (a) Distinguish monoecious and dioecious flowers. (b) Explain the methods of fertilization in each case. (c) Why do not all the blossoms produce fruit?

6. Distinguish with examples (a) rhizome, tuber, bulb; (b) pome, berry, achene; (c) umbel, raceme, cyme.

7. (a) Describe the specimen leaves as to venation, margin, apex and base.

(b) From the examination of these specimen leaves what inference may be drawn as to the branching of the plant and the arrangement of the leaves to obtain light and moisture?

Physics.

Time—Two and one half hours.

- Describe the Metric system of measurement under the headings:
 - Units of length, area, capacity, weight;
 - The relation of these to each other;
 - The advantage of this system over the one we now use. Give actual examples.

2. (a) Show the relation of the three states of matter by means of the theory of its molecular constitution.

(b) Mention the state of matter to which each of the following belongs: smoke, heat, snow flake, cold jelly, sealing wax

3. A piece of open tubing 8 feet long, held vertically, has a funnel in its upper end. Half way from the top of the tubing a shorter one enters tightly, at right angles to the first. The right end of the shorter is bent and runs to the bottom of a well corked bottle. This bottle is half filled with water. The funnel is filled with water.

(a) Describe, with reasons, what happens to the water that flows, down the long tube.

(b) Describe, with reasons, what happens to the contents of the bottle as the water flows down the long tube.

(c) Were the bottle not air-tight what difference if any would there be? Why?

(d) If the short tube entered the long one a foot from the funnel would there be any difference? If seven feet from the funnel? Why?

(e) Sketch the apparatus.

4. (a) Show in detail how a single experiment may illustrate all of the following:—momentum, unbalanced force, the second law of motion, wasted work, velocity, equilibrant, resultant. Define the last four terms.

5. (a) A needle is thrown on water. On what condition will it float?

(b) If the vessel containing the water be full what effect will the needle have when it sinks? When it floats? State the reason in each case.

(c) Show fully why the water allows the needle to sink.

6. If a cubical box be filled with water prove that the entire pressure on the sides is three times the weight of the water.

7. (a) How would you find the specific gravity of a quantity of salt? Show how the method used in this case differs from that used ordinarily in determining the S. G. of a solid.

(b) A piece of aluminum weighs 20.4 g. in air, 14.4 g. in water, and 14.94 g. in linseed oil. What is the S. G. of the aluminum? Of the oil?

(c) What is the volume of the aluminum?

8. What is meant by the temperature of maximum density of water? Explain how the density of water changes under different conditions of heat, and show the importance of this property in the economy of nature.

9. Name the different ways heat is transferred. Show how these are used for heating, cooling and ventilating.

Drawing.

Time—One and one-half hours.

1. Design a border using as a repeat the Greek Cross or the quatre-foil.

2. Group and sketch the sphere, cube and cylinder. Models may be used.

3. A book is placed by the presiding examiner in a horizontal position showing the back and one end. Make a shaded drawing of it.

4. Make drawings to represent :

(a) Three stages in the germination of a pea or a grain of wheat.

(b) The head of a cat, the foot of a cow, the bill of a duck, or a range of mountains forming a coast line.

SECOND CLASS.

Poetical Literature.

Time—Three hours.

“ Arthur's slow wain his course doth roll
In utter darkness round the pole ;
The Northern Bear lowers black and grim,
Orion's studded belt is dim ;
Twinkling faint, and distant far,
Shimmers through mist each planet star ;
Ill may I read their high decree :
But no kind influence deign they shower
On Teviot's tide and Branksome's tower
Till pride be quelled and love be free.”

1. (a) Who is the speaker in the above extract ? To whom are the words addressed ?

(b) Show clearly how the last three lines may be regarded as the key-note to the poem.

(c) Write brief notes upon : “ Arthur's wain,” “ Orion's belt,” “ planet star.”

(d) Scan lines 1, 5 and 6. Comment on the movement.

2. “ While thus he spake the bold yeoman
Entered the echoing barbicar.
He led a small and shaggy nag,
That though a bog, from hag to hag,
Could bound like any Billhope stag.
It bore his wife and children twain ;
A half-clothed serf was all their train :
His wife stout, ruddy and dark browed,
Of silver broach and bracelet proud,
Laughed to her friends among the crowd.
He was of statue passing tall,
But sparely formed and lean withal :
A battered morion on his brow ;
A leathern jack, as fence enow,
On his broad shoulders loosely hung ;
A border axe behind was slung ;
His spear, six Scottish ells in length,
Seemed newly dyed with gore ;
His shafts and bow, of wondrous strength,
His hardy partner bore.”

(a) Who is the character referred to? As a type, briefly compare him with William of Deloraine.

(b) Indicate accurately the connection of the above stanza in the poem. What purpose is served by its introduction?

(c) Sketch the circumstances immediately preceding.

(d) Explain "barbican" (l. 2), "Bag" (l. 4), "train" (l. 7), "morion" (l. 13), "fence enow" (l. 14).

3. Give the substance of the song sung at the wedding-feast by Harold, bard of St. Clair.

4. Give an account of that portion of the "Lay" which begins with the combat between Cranstoun and Musgrave and ends with the burial of the latter, such as might afford a fairly clear idea of the passage to one unacquainted with it.

5. To whom does each of the following passages apply :—

- (a) He would not waken old debate,
For he was void of rancorous hate,
Though rude and scant of courtesy.
- (b) Vengeance, deep-brooding o'er the slain,
Had locked the source of softer woe.
- (c) White was her wimple and her veil,
And her loose locks a chaplet pale
Of whitest roses bound.
- (d) He counterfeited childish fear,
And shrieked and shed full many a tear,
And moaned and plained in manner wild.
- (e) A palmer's amice wrapped him round,
With a wrought Spanish baldric bound,
Like a pilgrim from beyond the sea.
- (f) For he had himself been a warrior bold,
And fought in Spain and Italy.

6 Explain fully and concisely the italicised words in the following :

- (a) Me *lists* not tell of *owches* rare.
- (b) Seemed all on fire within around
Deep *sacristy* and altar's *pale*.
- (c) A stark *moss-trooping* Scot was he.
- (d) Give me in peace my *heriot* due.
- (e) And ill besems your rank and birth
To make your towers a *flemens-firth*.

7. Give a brief estimate of the chief excellencies and defects of Scott's poetry as exemplified in the Lay of the Last Minstrel.

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Prose Literature. (Silas Marner.)

Time—Two and one-half hours.

1. State the theme of this novel and mention the leading personages in each of the two chief groups of characters in it.

2. In which of these groups were you more interested? To what was this interest due.

3. Discuss the part played by Nancy in the Underplot.
4. Why does the author send Silas Marner to the Rainbow Inn to announce the robbery and why does she have so many persons present when he arrives ?
5. Compare the effect upon Silas of his devotion to his gold, and his devotion to Eppie.
6. Why does the author permit Godfrey Cass, in Part I, to escape the natural result of so many of his wrong-doings ?
7. Refer to at least two illustrations of pathos in this novel ? In what does the pathos in each consist ?
8. Discuss the influence of heredity as exhibited in this novel .

Grammar and Rhetoric.

Time—Two hours.

A

We see but half the causes of our deeds,
 Seeking them wholly in the outer life,
 And heedless of the encircling spirit-world
 Which, though unseen, is felt, and sows in us
 All germs of pure and world-wide purposes.
 From one stage of our being to the next
 We pass unconscious o'er a slender bridge,
 The momentary work of unseen hands,
 Which crumbles down behind us ; looking back,
 We see the other shore, the gulf between,
 And, marvelling how we won to where we stand,
 Content ourselves to call the builder Chance.

1. Give an analysis of the above extract so far as to show the kinds and relationship of the subordinate clauses.
2. State clearly the function and construction of each word ending in *-ing* in this passage ; of each *and* in this passage.
3. Give the construction of "causes" (l. 1), "unseen" (l. 4), "next" (l. 6), "work" (l. 8), "between" (l. 10), "to" (l. 11).
4. Distinguish sharply between the "predicate objective" and a "noun in apposition with the direct object." Give illustrations from this passage.
5. How does a derived word differ from an inflected word ; from a compound word ? Give illustrations from this passage.
6. Show from this passage how the addition of prefixes or suffixes or both affect the meaning of primitives, and the part of speech which the primitive is.

B

"The cliff called 'Starved Rock,' now pointed out to travellers as the chief natural curiosity of the region, rises, steep on three sides as a castle wall, to the height of one hundred and twenty-five feet above the

river. In front, it overhangs the water that washes its base; its western brow looks down on the tops of the forest trees below; and on the east lies a wide gorge or ravine, choked with the mingled foliage of oaks, walnuts and elms; while in its rocky depths a little brook creeps down to mingle with the river. From the rugged trunk of the stunted cedar that leans forward from the brink you may drop a plummet into the river below, where the catfish and the turtles may plainly be seen gliding over the wrinkled sands of the clear and shallow current. The cliff is accessible only from behind, where a man may climb up, not without difficulty, by a steep and narrow passage. The top is about an acre in extent."

1. State the purpose and the merit of this description.

2. Analyse this description, by sentences, so as to show the author's method.

3. Show the bearing of the last sentence upon the rest of the description.

4. Comment upon the use of "as a castle wall" (l. 3), "looks" (l. 5), "creeps" (l. 8), "wrinkled" (l. 12).

"The door opened, and a thick-set, heavy looking young man entered with the flushed face and the gratuitously elated bearing which mark the first stage of intoxication. It was Dunsey, and at the sight of him Godfrey's face parted with some of its gloom to take on the more active expression of hatred. The handsome brown spaniel that lay on the hearth retreated under the chair in the chimney-corner."

5 Show wherein this description differs in purpose from the previous one.

6. Show whether there is a corresponding change in the method.

Essays.

Time—One and one-half hours.

Write briefly—say three or four paragraphs—on three subjects selected from the list that follows. It is not the extent of your knowledge about the selected subjects so much as your ability to say a few things about them in a simple, clear, orderly and correct way that is the test.

1. One of the following :—

(a) Description of the Great Stone Pit.

(b) Description of Silas Marner with little Eppie that first evening in his cottage.

(c) Description of Godfrey Cass' wife as she walked through the snow-covered Raveloe lanes towards the Red House on New Year's Eve.

2. One of the following :—

(a) Give in narrative form the substance of the conversation between Godfrey and Dunstan over the selling of Wildfire.

(b) Give in narrative form the substance of the conversation between Godfrey and Nancy after the refusal of Eppie to leave Silas.

(c) Give in narrative form the substance of the conversation between Eppie and Silas about marriage.

3. Either of the following:—

(a) Discuss:—"When you saw a thing was not meant to be," said Nancy, "it was a bounden duty to leave off as much as wishing for it."

(b) Discuss:—"Dolly Winthrop told him that punishment was good for Eppie, and that, as for rearing a child without making it tingle a little in soft and safe places now and then, it was not to be done."

— — — — —
Arithmetic.

Time—Three hours.

1. Three men do .53 of a piece of work in 2.6 days; how long will it take 8 boys to finish it if 4 men and 3 boys can do the whole work in 3 days?

2. A Toronto firm is owed \$4,020 by a merchant in Vancouver. A draft for the amount on Vancouver is at $\frac{1}{2}$ per cent. discount in Toronto and a draft on Toronto bought in Vancouver is at $\frac{1}{2}$ per cent. premium. Which is the better way to cancel the debt, and by how much?

3. A and B receive 1,600 cabbages to plant but of these 10 are worthless. A plants 5 while B plants 4. After working some time they have not sufficient plants between them to complete another row, A having 45 to spare and B, 6. A has planted 3 rows more than B. How many cabbages did each plant, and how many cabbages were there in a row, each row having the same number of plants?

4. A merchant has £2,500 with which to buy bills of exchange in Paris. How much can the merchant save by using the better rate of exchange when (a) one pound sterling buys 25.8 francs or (b) one pound sterling buys at Amsterdam 12 florins, and these proceeds purchase bills upon Hamburg at $34\frac{1}{2}$ florins for 40 marks; these are forwarded to Paris and sold at the rate of 184 francs for 100 marks.

5. A merchant purchased goods amounting, at catalogue prices, to \$987.50 subject to a discount of 20 per cent. and 5 per cent., terms being 3 months credit, or 5 per cent. off for cash.

(a) To what rate of interest is the 5 per cent. off for cash equivalent?

(b) If the merchant were to discount at 7 per cent. a note drawn for three months for the amount of the above account by how much would the proceeds of the note exceed the cash amount of the account?

6. Money is worth five per cent. per annum:

(a) A railway stock is paying 9 per cent. dividend annually, and another is paying 2 per cent. Are they above or below par? Why?

(b) A man buys 50 shares of stock given at $104\frac{1}{4}$ and six months later sells them at $102\frac{1}{2}$ meanwhile receiving a 3 per cent. dividend, how much does he lose or gain?

7. Three equal circles of radius three feet each touch each other externally. Find the area of the space enclosed by the arcs between the touching points.

8. The interior of a building is in the form of a cylinder, 14 feet in radius and 12 feet in altitude, surmounted by a cone whose vertical angle is a right angle. Find the cubical contents of the building and the cost of painting the internal surface at $3\frac{1}{2}$ cents per square yard.

9. The volume of a sphere is 38,808 cubic inches. Find the cost of gilding the inner circle of a cubical box which exactly contains the sphere, when a square inch of gilding costs 5 cents.

10. The areas of two similar right angled triangles are 96 square feet and 54 square feet respectively. One leg of the smaller triangle is 9 feet, a non-corresponding leg of the larger triangle is 16 feet, find the length of the other sides.

Algebra.

Time—Three hours.

1. Divide $4t^4 + 2t^3 + 5t^2 + 8t + 1$ by $t + 1$. Use your result to write out the quotient of 42581 divided by 11.

2. (a) Prove that the product of any two expressions is equal to the product of their H.C.F. and L.C.M.

(b) Find the H.C.F. of $x^3 - x^2 - 2x + 2$ and $x^4 - 3x^3 + 2x^2 + x - 1$.

3. (a) What is meant by an "integral expression"?

(b) When is an expression said to be "rational"?

(c) Factor: (1) $(a^2 + b^2 - c^2)^2 - 4a^2b^2$.

(2) $x^4(p^2 + 1)x^2 + p^2$.

(3) $x^4 + 3x^2 + 1$.

$$\frac{n+m}{m} + \frac{m+n}{n}$$

4. Simplify:—(a) $\frac{\frac{n+m}{m} + \frac{m+n}{n}}{\frac{n-m}{m} + \frac{m-n}{n}}$

(b) $\left(\frac{x^2+y^2}{x^2-y^2} - \frac{x^2-y^2}{x^2+y^2}\right) \div \left(\frac{x+y}{x-y} - \frac{x-y}{x+y}\right)$

5. (a) What are "simultaneous equations"?

(b) Solve 1. $\frac{2x-3}{2x+1} + \frac{3x-7}{3x+5} = 2$.

2.
$$\begin{cases} 3x-4y+2z = -14 \\ 2x+y-5z = 33 \\ 5x+y-3z = 25 \end{cases}$$

6. (a) Fully explain the meaning of: x^0 , x^{-5} , $x^{\frac{3}{4}}$.

(b) Divide $a^{\frac{3n}{2}} - a^{-\frac{3n}{2}}$ by $a^{\frac{n}{2}} - a^{-\frac{n}{2}}$

7. Solve:—(a) $x^2 + px + a = 0$.

(b) $x + y = 18$ $x^2 + y^2 = 194$.

(c) $x^2 + \sqrt{x^2 - 7} = 19$. Which of your results will satisfy this equation?

8. (a) Show the relation between the roots and the coefficients of a quadratic equation.

(b) If m and n are the roots of $ax^2 + bx + c = 0$, find the value of $m^2 + mn + n^2$.

9. A capitalist has $\frac{2}{3}$ of his money invested in mining stocks which pay him 13 per cent., $\frac{1}{3}$ in manufacturing which pays him 9 per cent. and the balance in city bonds which pay him three per cent. What is his capital, if his income is \$26,640?

10. The diagonal of a rectangle is 25 inches. If the rectangle were 4 inches shorter and 8 inches wider the diagonal would still be 25 inches. Find the area of the rectangle.

Geometry.

Time—Three hours.

Note—Candidates must obtain at least 34 per cent. on each section.

A.

1. (a) Prove that all the interior angles of any rectilineal figure, together with four right angles, are equal to twice as many right angles as the figure has sides. Cor. I. I 32.

(b) Show that proposition (a) applies to figures with re-entrant angles.

(c) Find the number of degrees in the angle of a regular polygon of n sides. Apply your result to find the degrees in the angle of a regular hexagon.

2. (a) Prove that parallelograms on the same base, and between the same parallels, are equal to one another. I. 35

(b) Classify four sided figures according as they have (1) no pair of sides parallel, (2) one pair parallel, (3) two pairs parallel.

(c) Extend the proof of proposition (a) to any number of parallelograms on the same base and between the same parallels.

(d) What use is made of proposition (a) in the industrial arts?

3. (a) Prove that if a straight line be divided into any two parts, the rectangle contained by the whole and one of the parts is equal to the square on that part, together with the rectangle contained by the two parts. II. 3.

(b) Explain what is meant by the internal segments, and by the external segments of a line.

(c) Show that proposition (a) is true when applied (1) arithmetically, (2) algebraically.

(d) Enunciate proposition (a) when the line is divided into any number of parts.

4. Prove that if a straight line be divided into any two parts, the squares on the whole line, and on one of the parts are equal to twice the rectangle contained by the whole and that part together with the square on the other part. II. 7.

B.

5. (a) If a straight line be divided into any two parts, the square of the whole line is equal to the squares on the two parts, together with twice the rectangle contained by the two parts. II. 4.

(b) Deduce II. 7. from propositions II. 4. and II. 3.

6. Divide a given straight line into two parts, so that the rectangle contained by the whole and one of the parts may be equal to the square on the other part. II. 11.

7. (a) Prove that if two circles touch one another internally, the straight line which joins their centres, being produced, shall pass through the point of contact. III. 11.

(b) Two circles whose radii are 10 feet and 15 feet touch each other. Find the distance between their centres (1) when the contact is internal (2) when the contact is external.

(c) In the enunciation of proposition (a) point out where Euclid assumed what he has not yet proved.

8. (a) From a given point, either without or on the circumference, to draw a tangent to a given circle. III. 17.

(b) Prove that only two tangents to the same circle can be drawn from an external point.

(c) Two concentric circles whose radii are 6 feet and 12 feet are drawn. From a point in the circumference of the outer circle a tangent is drawn to the inner circle. Find an expression which will represent the length of this tangent.

9. (a) Prove that if from any point without a circle there be drawn two straight lines, one of which cuts the circle, and the other meets it, and if the rectangle contained by the whole line which cuts the circle, and the part of it without the circle, be equal to the square on the line which meets the circle, the line which meets the circle shall be a tangent. III. 37.

(b) Define tangent, secant, chord of a given circle.

(c) Two circles cut one another. Find the locus of the point from which tangents to the circles shall be equal.

Geography.

Time—Two hours.

1. Give the meaning of the following :

Drowned valley, the doldrums, horse latitudes, neap tides, terminal moraine, floodplain, denudation, erosion, nebular hypothesis, asteroids.

2. Write a note on the formation, probable boundaries and disappearance of Lake Agassiz.

3. Describe each of the five classes of bodies in the Solar system. Use a diagram for illustration.

4. If the earth's axis were wholly and constantly in the plane of its orbit through what points would the circle of illumination pass? How would our days and seasons be affected? How would the polar regions be affected?

5. In each of the following continents locate an area of great rainfall and a desert area, and account fully for each: North America, Asia, Africa.

6. Write on the foreign and domestic trade of any three of the following: Glasgow, New York, Para, New Orleans, Melbourne, Chicago, Manchester, Minneapolis, Liverpool.

7. Compare the characteristics of the river valley of an arid region with those of a humid region and account for the differences.

8. Write a note on the structure, climate, vegetable, and animal life of any one of the following: India, Ceylon, Australia, New Zealand.

Canadian and British History.

Time—Two hours.

1. Comment upon the industries of Canada under the French Régime.

2. State the main events that occurred during the rule of Lord Dorchester and estimate the services he rendered to the English Crown.

3. Give the reasons that led to the construction of the Interecolonial and Canadian Pacific railways. How have they affected the trade and development of Canada? Indicate their strategical importance to the British Empire.

4. Outline the growth of Responsible Government in the North-West Territories. What added powers would be gained if Provincial Autonomy were secured?

5. Sketch the progress of education prior to 1688 stating clearly the effect of the New Learning upon national life.

6. Compare the power of George I with that of James I. Give reasons for the change.

7. Outline briefly the history of the two political parties from the Revolution (1688) to the end of the reign of George III stating the attitude of each towards the Jacobites, the Revolutionary party in France, and the disaffection in the American Colonies.

8. Contrast the social and political condition of the common people at the commencement of the Brunswick Period with their condition at the present time. State the steps by which they rose to political power.

General History.

Time—Two hours.

1. Compare briefly the Aryan, Semitic and Hamitic races.

2. What were the three great commercial nations of the Ancient World? Write brief notes upon the trade of each,

3. Point out the leading characteristics of Persian civilisation.
4. How did the physical features of Greece affect the civilisation and political development of its people?
5. Comment briefly upon the literature of the Greeks.
6. Give a short sketch of the struggle between the Romans and the Carthaginians. If the Carthaginians had been victorious, how would the progress of civilisation have been affected?
7. Account for the rapid spread of Christianity during the first three centuries of the Christian Era.
8. Describe Roman life at the time of the Empire under the following heads:—Dress, amusements, houses, classes of the people.

Agriculture and Botany.

Second Class and First Class if required.

Note—The presiding examiner shall deliver all the specimens to one-third of the candidates at the beginning of the examination, transfer them to another third at the beginning of the second hour, and to the remaining third at the beginning of the third hour. Candidates are requested not to injure the specimens.

Note—Candidates must obtain at least 34 per cent. on each section.

Time—Three hours.

A.

1. (a) What are the causes of rust and smut? (b) How do they affect grain? (c) How should grain so affected be treated?
2. For cattle fattening compare the feeding properties of prairie hay, brome grass, roots and green fodder.
3. (a) Describe the tumbling mustard. (b) What are its effects upon crops? (c) What is its method of seed dissemination?
4. (a) State the benefits to be derived from tree culture. (b) What varieties of trees are best adapted for the growth in the North-West Territories and what soil would be most suitable in each case? Outline the care that should be taken when seeds are planted and when seedlings are transplanted.
5. (a) What might indicate the need for under-drainage? (b) Show how (i) drainage, (ii) lack of drainage affects the growth of crops. (c) What physical characteristics would determine the nature and plan of drainage?
6. (a) Give the characteristics of (i) heavy draught, (ii) carriage horses. What difference should be observed in their feeding?

B.

1. (a) Distinguish fertilisation and germination. (b) What is meant by cross-fertilisation? (c) How does self-fertilisation affect plants? (d) State the natural plant devices for aiding fertilisation,

2. (a) Describe a plant cell. (b) How are cells arranged into tissues? (c) What are the purposes of different tissues and where are they found? (d) Describe methods of formation of new cells.

3. (a) Compare mode of growth in stems of corn and in stems of maple. (b) Draw cross sections of each showing the different cellular arrangements.

4. (a) Give the uses of the parts of the flower. (b) From diagrams show traces of the flower parts in the fruit of the apple.

5. (a) Distinguish respiration and transpiration. (b) What are stornata? On what part of the leaf are they most numerous? (c) What class of plants have but few stornata? Why?

6. Define each of the following and give an example: (a) apocarpous, syncarpous; (b) dehiscent, indehiscent; (c) root, root-stalk; (d) pistillate, staminate.

7. Identify specimen A. By a diagram show the arrangement of its floral envelopes. Indicate the relation of the position of its parts to its pollination.

Physics.

Time—Two and one-half hours.

Data.

1 cubic feet water weighs 62.5 lbs.

1 gallon water contains 277.274 cubic inches and weighs 10 lbs.

S. G. gold 18, real diamond 3.5.

1. Show with descriptions of experiments how the theory of the constitution of matter applies,

(a) In the study of the relation between light, heat and sound.

(b) In the explanation of the difference between brittleness, ductility and elasticity.

2. (a) Describe a device for measuring the acceleration of a moving body under uniform conditions.

(b) Show how the average velocity of a body, moving under uniform conditions for n seconds may be determined by this device.

3. (a) The front wheel of a modern bicycle is lifted from the ground and spun. Mention the causes that bring its motion to rest if it is kept elevated.

(b) A weight of 2 lbs. is attached to the rim at a certain point. Explain its action on the rotation

4. A cylinder 3 feet long and 2 feet in diameter can withstand a uniform pressure on its sides of 7,200 lbs. to the square foot. If a tube 1 inch square is placed in the top and the tube and cylinder are filled with water,

(a) How long must the tube be in order that the pressure of the water may break the cylinder? (See data.)

(b) Where will it probably break?

5. (a) Define the moment of a force about a point. Apply the principle of moments to find the resultant of parallel forces,

(b) Two men A and B support the ends of a wooden beam six feet long and weighing 100 lbs. A weight of 225 lbs. hangs from the beam at a distance of 2 feet from A. What are the total weights supported by A and B respectively?

(c) Classify the following machines and show the advantage of each class: crow-bar, nut-cracker, wheel-barrow, pump-handle, pincers, boat-oar, see-saw.

6. A ring containing a supposed diamond weighed 46.5 g. in air and 43.5 g. in water. The gold put into it weighed 45 g. Was the stone a diamond? (See data.)

7. (a) A tuning fork is held over the mouth of a beaker. Describe how by slowly pouring in water you could illustrate the theory of wavelength, reflection of waves, resonance, interference.

(b) Name three instruments in which the phenomena illustrated by this experiment is made use of. In each example show how the principle is applied.

8. (a) Explain with examples of experiments how it can be shown that light is a form of energy.

(b) Show how your theory applies in the study of colour, of lenses and mirrors.

9. (a) Make a diagram showing an electric door-bell system with one button and one bell.

(b) How would you connect an additional button with the same bell while using the same battery? (Give diagram.)

10. Describe magnets under the headings: their shapes (and advantages of each shape), material, how magnetised, magnetic transparency, use.

Drawing.

First and Second Class.

Note—Instruments to be used for questions 3 and 4.

Time—One and one-half hours.

1. Make a shaded drawing of the cone with the ovoid lying to the left and slightly in front of it. (Models may be used.)

2. Sketch a hand holding a pen in the attitude of writing.

3. Make a working drawing of a circular wooden picture frame five inches in diameter, the circular opening for the picture being two and a half inches in diameter. Thickness half an inch.

4. Make a decorative design for this frame using the Fleur-de-lis, rosette or conventionalised buttercup as a repeat.

5. Make drawings to represent *one* of the following:

(a) A cross section of an apple,

(b) A branch of a maple tree showing arrangement of twigs and leaves.

(c) A robbin, showing bill, legs and toes.

6. Illustrate :

The breaking waves dashed high
On a stern and rock bound coast,
And the woods against a stormy sky
Their giant branches tossed.

FIRST CLASS.

Literature (First Paper.)

Time—Two hours and a half.

Miranda—

O dear father !
Make not too rash a trial of him, for
He's gentle, and not fearful.

Prospero—

What ! I say,
*My foot my tutor ?—*Put thy sword up, traitor,
Who mak'st a show, but dar'st not strike, thy conscience
Is so possessed with guilt : *come from thy ward ;*
For I can here disarm thee with this stick,
And make thy weapon drop.

Miranda—

Beseech your father !

Prospero—

Hence ! hang not on my garments.

Miranda—

Sir, have pity !
I'll be his surety.

Prospero—

Silence ! one word more
Shall make me chide thee, if not hate thee ! What !
An advocate for an imposter ! hush !
Thou think'st there is no more such shapes as he,
Having seen but him and Caliban ; foolish wench !
To the most of men this is a Caliban,
And they to him are angels.

Miranda—

My affections
Are, then, most humble ; I have no ambition
To see a goodlier man.

Prospero—[To Ferdinand]

Come on ; obey :
Thy nerves are in their infancy again,
And have no vigour in them.

Ferdinand—

So they are ;
My spirits, as in a dream, are all bound up.
My father's loss, the weakness which I feel,
The wrack of all my friends, nor this man's threats

To whom I am subdued, are but light to me,
 Might I but through my prison once a day
 Behold this maid. *All corners else o' the earth*
 Let liberty make use of; space enough
 Have I in such a prison.

Miranda—

Be of comfort.

My father's of a better nature, sir,
 Than he appears by speech; this is unwonted
 Which now came from him.

1. (a) What light does the above passage throw upon the character of Ferdinand and of Miranda?

(b) Describe briefly the circumstances of their meeting.

(c) Account for the attitude assumed by Prospero on this occasion.

(d) Explain clearly the italicised portions.

2. Being once perfected how to grant suits,
 How to deny them, who to advance, and who
 To trash for overtopping, new created
 The creatures that were mine, I say, or changed 'em
 Or else new formed 'em: having both the key
 Of officer and office, set all hearts i' the state
 To what tune pleased his ear, that now he was
 The ivy which had hid my princely trunk,
 And sucked my verdure out on't.

(a) To whom, of whom, and on what occasion is Prospero speaking?

(b) Give in simple prose the meaning of the above passage.

(c) "To trash for overtopping." Explain.

3. "O,

If you but knew how you the purpose cherish
 Whiles thus you mock it! how, in stripping it,
 You more invest it! Ebbing men, indeed,
 Most often do so near the bottom run
 By their own fear or sloth."

(a) By whom, and under what circumstance is this passage spoken?

(b) In your own words tell the thought intended to be conveyed.

4. Give brief character-sketches of Jessica and Nerissa. In doing so refer to special incidents in the play.

5. Describe in your own language either (a) The scene in Portia's house where Bassanio makes choice of the caskets (*i.e.* from the entry of the two until Bassanio gives Portia the ring), or (b) the scene in the Public Place in Venice when Antonio consents to "seal the bond" for Shylock.

6. Explain the italicised portions in the following extracts:—

(a) I pray you, think you *question with the Jew*.

(b) And if it stand, as you yourself still do,
Within the eye of honour.

(c) And let us *quicken his embraced heaviness*
 With some delight or other.

(d) If, it were a *kibe*
 'Twould *put me to my slipper.*

(e) Here's a maze trod, indeed
Through forthrights and meanders.

7. (a) What are the essential features of the Sonnet?
 (b) Quote one of the prescribed sonnets of Milton and show in how far it conforms to the Italian model.
8. Name the speaker, and explain in what connection each of the following passages occurs:—
- (a) How well could I have spared for thee, young swain,
 Enow of such as for their bellies' sake
 Creep, and intrude, and climb into the fold.
- (b) Rigour now has gone to bed
 And Advice with scrupulous head
 Strict Age, and sour Severity,
 With their grave saws in slumber lie.
- (c) A thousand fantasies
 Begin to throng into my memory,
 Of calling shapes, and beckoning shadows dire,
 And airy tongues that syllable men's names
 On sands and shores and desert wildernesses.
9. Sketch and compare the general characteristics of Epic, Lyric and Dramatic poetry. Refer to the literature prescribed for your class.

Literature. (Second Paper.)

Time—Three hours.

A

(The Lay of the Last Minstrel.)

1. Discuss the advantages of presenting this story through the mouth of the minstrel.
2. Discuss whether the success of this poem is due to the love story or to the descriptions of the life, scenes and characters of that age and locality.
3. State the Goblin's true position in the action of this poem and comment on the use of the supernatural in it.
4. What do you consider the most beautiful description in this poem? In what does the beauty consist?
5. Quote passages referring to any two of the following: patriotism, love, minstrelsy.
6. Comment upon the truth of Scott's description of border life in this poem.
7. Compare the movements in the following passages and say by what devices each is secured:
 What he gives thee, see thou keep;
 Stay not thou for food or sleep:
 * * * * *
 O swiftly can speed my dapple-gray steed,
 Which drinks of the Tevoit clear;
 * * * * *

That day of wrath, that dreadful day,
When heaven and earth shall pass away!

8. Briefly describe the chief incidents of Canto IV from the time that

“ Martial murmurs from below
Proclaimed the approaching Southern foe,”

until the time

“ When Deloraine, from sickness freed,
Or else a champion in his stead
Should for himself and chieftain stand
Against stout Musgrove hand to hand.”

B.

(Silas Marner.)

1. What is the purpose of each of the two leading groups of characters in the development of the theme of this novel, and in the working out of the plot?

2. Discuss the relation to plot and underplot of the incidents arising from the agreement between Godfrey and Dunstan to sell “ Wildfire.”

3. “ But I beg and pray of you to leave off weaving of a Sunday, for it's bad for soul and body; and the money as comes i' that way 'ull be a bad bed to lie down on at the last.”

State briefly Dolly Winthrop's theology as expounded by her to Silas.

4. Comment upon the influence of women as exhibited in this novel.

5. Discuss the influence of environment on character, as illustrated in this novel.

Grammar and Rhetoric.

Time—Two Hours.

A

Man views it and admires, but rests content
With what he views. The landscape has his praise,
But not its author. Unconcerned who formed
The paradise he sees, he finds it such,
And such well pleased to find it, asks no more.
Not so the mind that has been touched from heaven,
And in the school of sacred wisdom taught
To read his wonders in whose thought the world,
Fair as it is existed ere it was.
Not for his own sake merely, but for his
Much more who fashioned it, he gives it praise.

1. Beginning at “ unconcerned who formed ” write out each subordinate clause and state its function and relation.

2. Select illustrations of the different kinds of the objective relation (case) to be found in this extract. Distinguish their uses.
3. Parse each participle and each infinitive in the extract.
4. Comment upon the uses of "has" "was" and "more" in the extract.
5. Analyse the following giving the force of root-words, prefixes and suffixes: unconcerned, landscape, wisdom.
6. Write a note upon the Midland (Eastern) Dialect of the Middle English Period describing some of its characteristics and accounting for its supremacy.

B.

"(1) The perfect historian is he in whose work the character and spirit of an age is exhibited in miniature. (2) He relates no fact, he attributes no expression to his characters, which is not authenticated by sufficient testimony. (3) But by judicious selection, rejection and arrangement he gives to truth those attractions which have been usurped by fiction. (4) In his narrative a due subordination is observed, some transactions are prominent, others retire. (5) But the scale on which he represents them is increased or diminished, not according to the dignity of the persons concerned in them, but according to the degree in which they elucidate the condition of society and the nature of man. (6) He shows us the court, the camp and the senate. (7) But he shows us also the nation. (8) He considers no anecdote, no peculiarity of manner, no familiar saying as too insignificant for his notice which is not too insignificant to illustrate the operation of laws, of religion, and of education, and to mark the progress of the human mind. (9) Men will not merely be described, but will be made intimately known to us. (10) The changes of manners will be indicated not merely by a few general phrases or a few extracts from statistical documents, but by appropriate images presented in every line."

1. State the purpose of this paragraph and indicate the method used to accomplish it.
2. By means of a plan of this paragraph show its conformity with the laws of paragraph structure.
3. What is the rhetorical value of negation as used in this paragraph? Illustrate.
4. State the purpose of sentence 3. What other sentences in this paragraph have a similar purpose? Comment upon the value of this device.
5. Which qualities of style do you consider this paragraph to possess in a marked degree? Illustrate.
6. Comment upon the punctuation of sentence 4.

Essays.

Time—One and one-half hours.

Write briefly—say three or four paragraphs—on three subjects selected from the list that follows. It is not the extent of your knowledge about the selected subjects so much as your ability to say a few things about them in a simple, clear, orderly and correct way that is the test.

1. One of the following:—

- (a) Description of Godfrey Cass.
 (b) Description of Silas Marner the evening he discovered the loss of his gold.
 (c) Description of Nancy Lammerter as she appeared on a pillion approaching the Red House on New Year's Eve.

2. Either of the following:—

- (a) Give in narrative form the substance of the conversation between Godfrey and Nancy when he tells her of the finding of Dunstan's body, and who Eppie is.
 (b) Give in narrative form the substance of the conversation between Silas and the minister in presence of the vestry in Lantern Yard.

3. One of the following:—

- (a) Discuss:—"I wasn't brought up to be a lady and I can't turn my mind to it."
 (b) Discuss:—Work as a remedial factor in the development of character.
 (c) Discuss:—"The prevarication and white lies which a mind that keeps itself ambitiously pure is as uneasy under as a great artist under the false touches that no eye detects but his own are worn as lightly as mere trimmings when once the actions have become a lie."

Algebra.

Time—Three hours.

A.

1. (a) Write down the quotient when the sum of $(2a+b+2c)^3$ and $(a+2b+c)^3$ is divided by $(2a+b+2c)^2 - (a+2b+c)(2a+b+2c) + (a+2b+c)^2$.

(b) What value of m will make $x^2+3x-10$ a factor of $3x^3+8x^2+mx+10$?

2. (a) Prove that any expression which is a factor of each of two other expressions is a factor of the sum or difference of any multiples of these other expressions.

(b) For what values of x will $2x^4+4x^3+3x^2-2x-2$ and $2+2x+7x^2+6x^3+3x^4$ vanish?

3. A train after travelling an hour from A towards B, meets with an accident which detains it half an hour, after which it proceeds at four-fifths of its usual rate, and arrives an hour and a quarter late. If

the accident had happened 30 miles farther on the train would have been only an hour late. Find the usual rate of the train.

4. (a) Prove that the sum of any fraction and its reciprocal can never be less than 2.

(b) Solve $\frac{x^2 + 3x}{2x^2 - 3} + \frac{2x^2 - 3}{x^2 + 3x} = \frac{5}{2}$

(c) Of how many dimensions is the equation in (b)? Account for the number of answers.

5. (a) Show that $\left(\frac{2 - \sqrt{3}}{2}\right)^{-\frac{3}{2}} - \left(\frac{2 + \sqrt{3}}{2}\right)^{\frac{3}{2}} = 7 \left[\frac{\sqrt{3} + 1}{2}\right]^3$

(b) Prove that any one of the cases of the fundamental Index Law has been made use of in the solution of (a).

B.

6. (a) Examine the effect (1) of multiplying each term of a ratio by the same number; (2) of adding the same number to each term of a ratio

(b) If $\frac{x}{b+c-a}$; $\frac{y}{c+a-b}$; $\frac{z}{a+b-c}$ be equal and not zero, show that $(b-c)x + (c-a)y + (a-b)z$ will be zero.

7. (a) In a geometrical progression show that the product of any two terms equally distant from the extremes is constant.

(b) Find the number of cannon balls in a complete pyramidal pile on a square base with 12 balls to a side.

8. (a) Deduce the method of finding the number of permutations of n different things taken r at a time when r is any integer not greater than n .

(b) Out of 12 Conservatives and 16 Liberals how many different committees can be formed each containing 3 Conservatives and 4 Liberals?

9. (a) In the expansion of $(1+x)^n$ find the greatest term. Apply your result to find the greatest term in the expansion of $(1+3x)^{18}$ when $x = \frac{2}{3}$.

(b) In a binomial expansion prove the following properties:

(1) The sum of the coefficients $= 2^n$.

(2) The sum of the coefficients of the odd terms is equal to the sum of the coefficients of the even terms.

Geometry.

Note—Candidates must obtain at least 34 per cent. on each section.

Time—Three hours.

A.

1. (a) Prove that if a straight line meet two parallel straight lines it makes (1) the alternate angles equal to one another; (2) the exterior angle equal to the interior and opposite angle on the same side; (3) the

two interior angles on the same side together equal to two right angles. I. 29.

(b) What property of parallel lines is laid down in the definition of them? What properties of parallels are deduced from this definition?

(c) Draw a line intersecting the sides of a triangle and parallel to the base, such that it shall be equal to the sum of the portions of the sides intercepted between it and the base.

2. (a) Describe a square that shall be equal to a given rectilinear figure. II. 14.

(b) Enunciate the propositions by which Euclid arrives at describing a square equal to a rectilinear figure.

(c) Divide a given straight line, internally, so that the rectangle contained by its segments may be equal to a given square whose side is not greater than one half the given line.

3. Prove that equal chords in a circle are equally distant from the centre. III. 14.

4. (a) Prove that if from any point without a circle two straight lines be drawn, one of which cuts the circle, and the other touches it, the rectangle contained by the whole line, which cuts the circle, and the part of it without the circle shall be equal to the square on the line which touches it. III. 36.

(b) ABC is a triangle, right angled at C, and from any point P in AC a perpendicular PQ is drawn to the hypotenuse; prove that the rectangle CA, AP is equal to the rectangle BA, AQ.

B.

5. Prove that the angles in the same segment of a circle are equal to one another. III. 21.

6. (a) Inscribe a circle in a given triangle. IV. 4.

(b) Draw an escribed circle of a given triangle.

(c) The vertex of the triangle, the centre of the inscribed circle and the centre of the escribed circle touching the base lie in the same straight line.

7. Describe an isosceles triangle, having each of the angles at the base double the third angle. IV. 10.

8. (a) Prove that a straight line parallel to one side of a triangle cuts the other two sides (or these sides produced) proportionately; and conversely, the straight line joining points which divide two sides of a triangle (or these sides produced) in the same ratio is parallel to the third side. VI. 2.

(b) Prove that parallel lines cut diverging lines proportionately.

9. (a) If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the segments of the base shall have the same ratio which the other sides of the triangle have to one another.

Conversely, if the segments of the base have the same ratio which the other sides of the triangle have to one another the straight line drawn from the vertex to the point of section shall bisect the vertical angle. VI. 3.

(b) Apply this proposition to trisect a given finite straight line.

*Trigonometry.**Time—Three hours.*

1. (a) Define the common logarithm of a number.
 (b) What are the advantages of base 10?
 (c) If the mantissa be always made positive, show that the characteristic can be found by inspection.

(d) Find the logarithms of the following: $\frac{460.89 \times 33744}{11577 \times 79719}$;
 $\frac{1}{2} \sqrt{2}$; $(0.00768)^{\frac{1}{100}}$

2. (a) Define the sine and cosine of an angle between 0° and 180° , and find the numerical limits between which these quantities lie.

(b) If $\sin A = \sin B$ what is the relation between A and B each being less than 180° ?

(c) Construct the tabular logarithm for $\cos 30^\circ$.

3. (a) Prove the following relation: $\sec^4 A - 1 = 2 \tan^2 A + \tan^4 A$.

(b) Find the general expression for angle A which will satisfy the equation $4 \sin A - 3 \operatorname{cosec} A = 0$.

4. Solve graphically and by computation: A tower on the bank of a river is 120 feet high and the angle of elevation of its top from the opposite bank is 20° ; find the river's breadth if $\tan 20^\circ = .35$.

5. Compare the sin and cos of $90 + A$ with the sin and cos of A where A is any angle.

6. Explain the phrase "dip of the visible horizon" and deduce the method of finding the distance of the visible horizon from an elevation.

7. Prove any two of the following identities:

$$(a) \frac{\sin 2A}{1 - \cos 2A} = \cot A.$$

$$(b) \frac{2 - \sec^2 A}{\sec^2 A} = \cos 2A.$$

$$(c) 1 - \tan A \tan B = \frac{\cos(A+B)}{\cos A \cos B}$$

8. Deduce any three of the following, (a) being one:—

$$(a) \cos(A-B) = \cos A \cos B + \sin A \sin B.$$

$$(b) \cos A + \cos B = 2 \cos \frac{A+B}{2} \cos \frac{A-B}{2}$$

$$(c) \text{In any triangle } \cos A = \frac{b^2 + c^2 - a^2}{2bc}$$

$$(d) \sin \frac{1}{2} A = \frac{\sqrt{(s-b)(s-c)}}{bc} \text{ where } s = \frac{1}{2} \text{ perimeter.}$$

9. A person stands in the diagonal produced of the square base of St. Mary's church tower, at a distance a from it, and observes the angles of elevation of the two outer corners of the top of the tower to be each 30° , and of the other corner 45° . Show that the breadth of the tower $A\sqrt{3 \pm \sqrt{5}}$.

Num.	Log.
11577	06360
20000	30103
30000	47712
33744	52820
35899	22855
46089	66358
79719	90156

10. If ABC be a triangle, R the radius of the circumscribed circle, r the radius of the inscribed circle, and ra the radius of the escribed circle touching a , prove that $R = \frac{abc}{4s}$; or $r = \frac{S}{s}$ or $2a = \frac{S}{s-a}$.

Constitutional History.

Time—Two hours.

1. "In the meantime our statesmen have the greatest opportunities they have had for many years, and likewise the greatest duty." Of what period of time is Bagehot speaking? Explain clearly the opportunities and the duty.

2. What does Bagehot conceive to be the characteristic merit of the English Constitution? Criticise his view.

3. Point out the merits and defects of the House of Lords.

4. State the functions of the House of Commons. Which do you consider to be of the greatest importance? Give your reasons.

5. What are the pre-requisites of Cabinet Government?

6. Compare the systems of government of New England and New France. What effect would the difference have on the political situation subsequent to 1763?

7. "The passage of the Union Act of 1840 was the commencement of a new era in the constitutional history of Canada as well as of the other provinces." Explain somewhat fully.

8. Outline briefly the general features of the Senate showing clearly the difference between it and the House of Lords.

9. Write a brief note upon the position of the judiciary in Canada.

General History.

Time - Two hours.

1. Point out the main difference between the Aryan and Semitic nations.

2. Compare Greek and Latin civilisation under the following heads:—Education, literature, religion, government.

3. Write brief notes upon Lyeurgus and Julius Caesar showing clearly the services rendered by each to the state.
4. Outline briefly the career of Charlemagne and point out his distinguishing traits of character.
5. Contrast the old and the new learning and show the effect of the introduction of the latter upon the national life of England.
6. "The 18th century was a period of wonderful changes." State them.
7. Give reasons for the passing of the Reform Bill and the repeal of the Corn Laws.
8. Sketch the growth of the British Empire.

Physics.

Time - Two and one-half hours.

Data.

Ice S.G. 925 ; lead S.G. 113 ; mercury S.G. 13.6 ; platinum S.G. 21.5 ; sea-water 1.025.

1. Different shaped vessels of the same height are filled with water. Their shapes and dimensions are as follows : vessel A is the frustrum of a square pyramid, bases 6 c.m. and 2 c.m. ; vessel B is the frustrum of a cone, diameters of bases 6 c.m. and 2 c.m. ; vessels C, D and E are cylinders, bases 6 c.m., 2 c.m. and 1 m.m. respectively.

(a) Compare the pressure on the bases of each frustrum as it is inverted.

(b) Compare the pressure on the bases of C, D, and E.

(c) Account for any apparent paradoxes.

2. A boy arranges an inclined plane 20 feet long and 5 feet high with a wheel and axle on the top. The diameter of the wheel is 2 feet and of the axle 8 inches. He fixes a cart by a rope to the axle and by pulling on another rope which is wound around the wheel moves himself up the plane in the cart. To do so he finds that he has to exert a force of 15 pounds.

(a) What is the amount of resistance offered to the motion of the cart up the plane ?

(b) How much do the boy and cart weigh ?

(c) How fast will the boy move horizontally along the ground if he pulls off 20 feet of rope per minute ?

3. Define the term magnetic declination and show why it varies from point to point on the earth's surface.

4. A thermometer is placed in the fluid of the cell of an electric battery. Is there any difference in the temperature when the battery is working and when it is not ? If so use the phenomenon to make a clear statement of the theory of energy.

5. Six cells, each of e. m. f. one volt and internal resistance 75 ohm. are to be connected with an external resistance of one ohm. (a) Show

by diagrams the possible methods of arrangement of the cells. (b) Prove by numerical work the best arrangement for a maximum current.

6. (a) Determine that fraction of the volume of an iceberg that is above water from the data given at the beginning of this paper.

(b) A cube of platinum 2 c. m. on a side attached to one arm of a balance is completely immersed in mercury. It is exactly counter-balanced by a sphere of lead attached to the other arm of the balance and completely immersed in water. What is the diameter of the sphere?

7. (a) Show how to find the value of g by means of a bullet, a watch and a tape measure.

(b) An elevator is descending at a uniform rate of 16 feet a second when a bundle is knocked off and falls to the floor of the building 100 feet below.

(i) How long is it in falling?

(ii) What is the distance between the bundle and the elevator at the time the bundle strikes the floor?

8. A river runs at the rate of four miles an hour between parallel banks half a mile apart. (a) Find the least time it will take a man rowing five miles an hour to cross. (b) Find his absolute velocity at any point of his path.

9. (a) Describe and illustrate by diagram the motion of air in organ pipes.

(b) Account for the difference in quality of tone between stopped and open pipes.

10. Account scientifically for each of the following:

(a) A crack in a mirror impairs its use as a reflector.

(b) The heat phenomenon when the skin is covered by the hand after it has been wet by ether.

(c) A man cannot see himself at full length in a vertical mirror unless the mirror is at least one half as long as he.

(d) The colours seen in a soap film.

11. An 8-candle power lamp and a candle are placed 5 inches apart. How far from the lamp in a straight line joining the flames must a screen be placed that it may be equally illuminated by each of them?

Chemistry.

Time—Two hours.

1. What is meant by chemical action? Give illustration showing that heat, light and electricity may be an effect as well as a cause of chemical action.

2. Describe an experiment to show whether air is a mechanical mixture or chemical compound.

3. (a) Distinguish Oxygen and Ozone. (b) Outline the laboratory preparation of Oxygen. Make drawings of the apparatus required.

4. (a) State the properties of each of the allotropic forms of Carbon. What are the principal sources of each in nature?

(b) Show experimentally the use that may be made of Charcoal as an absorbing, deodorising and reducing agent.

5. Outline a method of detecting the presence of (a) Arsenic
(b) Caustic Potash.

6. (a) Write notes on the chemistry of Ammonium under the following heads: (1) sources, (2) properties, (3) uses, (4) tests.

(b) Illustrate by symbols the compounds formed when Ammonia is passed into Sulphuric Acid, Nitric Acid, Hydrochloric Acid, Water.

7. Write equations explaining the reactions when,—

(a) Chlorine is passed into Hydrogen Sulphide;

(b) Hydrogen is passed through a tube containing heated Copper Oxide;

(c) Potassium Chlorate is decomposed by heat.

8. Discuss the chemical relations which exist between Chlorine, Iodine, Bromine, and Fluorine.

9. Explain the meaning of the term Quantivalence? Illustrate by reference to the elements Carbon, Nitrogen and Chlorine.

10. (a) A certain substance is composed of 27.27 per cent. Carbon, and 72.73 per cent. Oxygen. What is its formula?

(b) What weight of Carbon is needed for the formation of 88 grams of Carbon Dioxide?

Biology.

Time—Two and one-half hours.

1. "Living matter is lifeless matter in a peculiar state or condition."

(a) Justify this statement.

(b) Outline the tests that would determine to which class a body belongs.

2. (a) Explain and show the importance of the statement that "vital energy does not imply vital force."

(b) Describe life. Show how a yeast plant and an infusoria fulfil the conditions of your description.

3. Describe a cell under the following headings: definition; appearance; structure; a short account of its development; differentiation; comparison of cells of plants and animals.

4. Using the subjoined headings give an account of the earthworm; its nutritive system, one of its organs of relation, its structural and functional adaptation to its environment.

5. "Thus it comes about that there is more or less steady flow of matter and of energy through the living organism, which is itself a centre of activity, like a whirlpool." *Text.* By reference to the brake illustrate what is meant, using the scientific terms for these different processes.

6. By reference to a plant illustrate the terms: bilateral symmetry, antero-posterior, and dorso-ventral differentiation, alternation of generation, metabolism, function, system.



RURAL SCHOOL, EDGELEY, S. D. NO. 39, ASSA.



RURAL SCHOOL, POPLAR LAKE, S. D. NO. 185, ALTA.



PUBLIC SCHOOL, MEDICINE HAT, ASSA.



PUBLIC SCHOOL, MOOSE JAW, ASSA.

7. (a) Define organism. Show why scientists classify unicellular forms as organisms.

(b) Analyse the parts of one of the higher living bodies showing the differentiation of its parts.

8. (a) Draw and describe the essential parts of specimen—Slide A. Name it and three of the contents shown in your drawing.

(b) Describe the structure of specimen—Slide B, and state the use of each part to the organism of which it forms a part.

(c) Describe the tissue observed in specimen—Slide C.

PROFESSIONAL.

THIRD CLASS.

Pedagogy.

1. Distinguish original and acquired sense-perceptions. Compare them as to value, taking illustrations from geography, nature study and history.

2 Describe the elements in an act of memory. Select some stanza of poetry, some definition in grammar, or some formula in algebra and show how to memorise it.

3. Distinguish induction and deduction. Show how you will teach adjective phrase (a) inductively; (b) deductively. Give reasons for the method you prefer.

4. Explain and criticise the maxim: "Processes before rules." Give illustrations from arithmetic.

5. "In the teaching of any school art clear and correct ideals should inspire and guide practise." Justify this statement. Show how it applies in penmanship or composition.

6. Describe and compare as to educational value the question and topic methods of testing a pupil's knowledge.

Organisation, Management and Law.

1. Upon what basis will you classify pupils in a school opening for the first time?

2. (a) Upon what basis will you promote pupils?

(b) What legal check is imposed upon the teacher's promotion of his pupils?

3. State the purposes of recesses and discuss the duties of teachers in connection therewith.

4. Mention the chief considerations that should guide a teacher in the construction of a time table.

5. How will you deal with any two of the following offences: Tardiness, theft, impertinence?

6. Discuss the problem of home work in rural schools.

7. State briefly the substance of the provisions of The School Ordinance with regard to the selection of reference books and apparatus, the suspension of pupils, mode of estimating the salary of a teacher who has been engaged in a district for at least four months continuously, wilful interruption of a school in session.

Literature, Reading, Spelling.

God bless her, wheresoe'er the breeze
 Her snowy wing shall fan,
 Beside the frozen Hebrides,
 Or sultry Hindostan ;
 Where'er in mart or on the main,
 With peaceful flag unfurled,
 She helps to wind the silken chain
 Of commerce round the world.

Speed on the ship but let her bear
 No merchandise of sin,
 No groaning cargo of despair
 Her roomy hold within ;
 No heathen drug for Eastern lands
 Nor poison draught for ours ;
 But honest fruits of toiling hands
 And Nature's sun and showers.

Be hers the prairie's golden grain,
 The deserts golden sand,
 The clustered fruits of sunny Spain,
 The spice of Morning-land !
 Her pathway on the open main
 May blessings follow free,
 And glad hearts welcome back again
 Her white sails from the sea.

1. Give a title for this selection.
2. State concisely the thought of each stanza.
3. Indicate how to teach the two chief figures of speech in the first stanza.
4. (a) Mention three difficulties pupils in Standard IV would probably have in studying the second stanza.
 (b) Ask questions that will lead pupils to overcome these difficulties.
 (c) Answer these questions.
5. Give examples of seat work to be assigned pupils who had just been taught this selection.
6. Give illustrations of the preparatory work to be done with pupils before testing them on the spelling of the difficult words in the selection.

“ At length we stopped before a very old house bulging out over the road ; a house with long low lattice windows bulging out still farther, and beams with carved heads bulging out too, so that I fancied the

whole house was leaning forward, trying to see who was passing on the narrow pavement below. It was quite spotless in its cleanliness. The old-fashioned brass knocker on the low arched door, ornamented with carved garlands of fruit and flowers, twinkled like a star; the two stone steps descending to the door were as white as if they had been covered with fair linen; and all the angles and corners, and carvings and mouldings, and quaint little panes of glass, and quainter little windows, though as old as the hills, were as pure as any snow that ever fell upon the hills."

7. Ask not more than four questions to lead pupils to discover the chief impressions which Dickens aimed at producing in the description. Answer each question briefly.

8. Ask questions intended to lead pupils to see the force of "trying to see who was passing on the narrow pavement below."

9. State the uses and limitations of the "word" and "phonic" devices in teaching primary reading.

10. Outline plans for securing expressive oral reading in the first two standards.

Grammar and Composition.

No endeavour is in vain,
Its reward is in the doing.
And the rapture of pursuing
Is the prize the vanquished.

1. Ask questions that should lead pupils in Standard V to determine whether each "is" in this stanza is a "notional" or a "relational" verb.

2. Ask questions that should lead pupils to parse the phrases "in vain," "in the doing."

3. Show how you will lead pupils to parse "no" and "vanquished."

4. In what way does the parsing help pupils to read this stanza?

5. Show by means of questions, etc., how you will prepare pupils in Standard II to write a composition on the picture in Part II Reader page 25. Write such a composition as you expect.

6. Give illustrations of how you will teach children in Standard II to write direct quotations.

7. Show by a specific example how you will utilise a nature study, geography or history lesson as a composition exercise in Standard III. Write the first two paragraphs of such a composition.

8. Show how you will teach pupils in Standard IV to write a letter to the Century Co., Union Square, New York, containing a money order for three dollars to pay for one year's subscription to "St. Nicholas." The subscription to begin with the November number.

Write the letter.

Arithmetic and Algebra.

1. What is meant by "counting" in primary work? Show how it assists the child in acquiring a knowledge of number. When should the process be discontinued?

2. (a) Outline your method of teaching the numbers from 12 to 25. (1 Part 2.)

(b) How would you teach the fractions of 16?

3. Give methods for drill in calculation in St. II.

4. "4 lbs. of flour make 5 lbs. of bread and one loaf weighs $1\frac{1}{2}$ lbs. Find the cost of the flour in 100 loaves when it is \$6 a bbl. of 196 lbs."

(a) What difficulties will you expect a pupil in St. III to have with this question?

(b) Give four questions that you would ask to lead him to the solution.

5. A and B invested the same amount of money in business. At the end of three years it was found that A's capital was \$500 less than he had at first, that B's capital was \$1,500 less than twice his original capital, and that the combined capital had increased 25%. What was the original capital of each?

(a) Give an (1) arithmetic and (2) an algebraic solution to the above.

(b) Show the advantage one solution has over the other.

6. How do you account for the fact that algebra is often quite meaningless to beginners? How would you prevent this?

7. (a) Using the following equation as a type, show how simultaneous equations should be attacked.

(b) Give the best solution you can.

$$\frac{2x}{5} + \frac{3y}{10} - \frac{z}{5} = 9$$

$$\frac{z}{x} + 8 = 10$$

$$\frac{4x + 3y - 2z}{3} = 30$$

Geometry and Mensuration.

Note: Instruments—ruler, protractor, compass and triangle. Accuracy of drawing is required in construction. All construction lines to be left.

1 For what reasons should geometry be taught? What, if any, benefits are derived from it which may not be obtained as well from arithmetic or algebra?

2. Outline a lesson on surface, line and point.

3. A B C D is rectangle. Divide it into five equal parts. Prove each step.

4. (a) Construct an angle of 120° . Use compass and ruler only.
 (b) Of what regular figure is this an angle?

5. In five questions or less show how a class can be led to construct a parallelogram, given one side, one angle and one diagonal.

6. One side of a room in the form of a regular pentagon is 12 dm. long. From the centre to the middle of one side is 150 cm. Find the cost of painting the floor at 50c. a hundred square feet.

7. Your pupils tell you that the perpendicular bisectors of the three sides of a triangle meet at a point but they cannot prove it. Give a series of questions that will lead them to the proof.

8. Illustrate your methods of attacking a theorem in Euclid. Refer to Euclid for examples of each.

Geography and History.

1. Illustrate how you will teach pupils to interpret maps.

2. (a) Indicate the nature of the instruction you will give to Standard II on the characteristic animals, plants and peoples of the continents.

(b) Name the animals of Asia, the peoples of Africa and the plants of South America you would teach to this standard.

3. By reference to Ontario, British Columbia, Nova Scotia and the Territories show how you will teach the relation between natural products and manufacturing and distributing centres.

4. Outline a lesson on the comparative study of the continents of South America and Eurasia. Your lesson is to show how relief affects climate.

5. (a) Give a lesson plan on one of the following characters: Champlain (Standard II), Sir John Macdonald (II), Wolseley (III), Victoria (III).

(b) What is the purpose of this study in this standard?

(c) Show how your lesson fulfils this purpose.

6. (a) Discuss the advantages of the topic method in history.

(b) Give headings of topics of political growth under the Planagets, or under British rule in Canada (Standard V.)

7. How would you use the life of William Lyon Mackenzie in teaching a similar figure in British History?

Nature Study and Hygiene.

1. What are the general aims of Nature Study in the junior Standards?

2. Outline the observational work that should be required by pupils preparatory to a class lesson on the gopher, duck or grasshopper. State the specific aims of this lesson.

3. Give notes of a lesson on the apple to show the adaptation of its colour, form and taste to the development and dissemination of its seeds.

4. Give the facts and outline the method to be used in studying "clouds" in Standard II. What literature would you read with your pupils while continuing the study of clouds?

5. Give notes of a lesson to pupils in Standard IV on the preparation of soil for a crop of carrots; or on the preparation of unbroken prairie for a crop of wheat.

6. Give notes of a lesson on how to disinfect a room in which a person has been ill with a contagious disease.

7. Give notes of a lesson to pupils in Standard IV on bathing.

Drawing.

1. (a) Outline a form lesson on the cube to a class in Standard I.

(b) Describe a drawing lesson on the cube to a class in Standard II.

2. Sketch a partly open chalk box, slightly below the level of the eye.

3. Hang a man's coat on a nail in the wall or on the back of a chair and sketch.

4. Sketch a snow-capped mountain with trees on its lower slopes, or a range of mountains.

5. Make three sketches illustrating the germination of a pea.

6. Illustrate the following:

"By the shores of Gitche Gummee,
By the shining Big Sea Water,
Stood the wigwam of Nokomis."

Music.

1. Give time names for two-part, three-part and four-part measures.

2. Define and illustrate the following terms: Major scale, chromatic scale, staff, note, rest.

3. Write four measures of music in each of the following keys: E, F, B \flat .

4. Give instructions for getting from a C pitch pipe, the following keys: G, E \flat , D.

5. Indicate how you would endeavour to secure (a) expressive singing, (b) good articulation, (c) softness and purity of tone.

6. Name, with reasons, three songs which you think suitable for pupils in Standard I; also three songs which you consider suitable for Standards III and IV.

SECOND CLASS.

Psychology.

1. (a) What are the chief factors in the development of the human mind? (b) Distinguish between those factors that can and those factors that cannot be controlled by the educator, and point out the importance of your distinction to the teacher.

2. Name the laws that control the degree of attention. Show how these laws must be observed in seeking to develop attention.

3. "The senses do not give us knowledge, but only the materials out of which knowledge is built up by the mind." Explain this statement and show by reference to a picture-lesson its bearing on the purpose and method of object-teaching.

4. Name the chief ways in which a child can be assisted in committing to memory (1) a verse of poetry, (2) the events in a period in history, (3) a problem in geometry.

5. Describe, (1) effective, (2) defective apperception. Illustrate by reference to seignorial tenure (Standard IV), and clouds (Standard II).

6. Give some account of the nature and conditions of sympathy. It is said to be easier to make children sympathetic than just, and easier to make them sympathise with adversity than with prosperity. Examine these statements and discuss their educational bearings.

7. State and illustrate the laws of habit. Why is habit called "the memory of the will?"

Pedagogy.

1. Explain what is meant by "drill" and briefly discuss its value. Apply to arithmetic and reading. Show the conditions under which drill is profitable.

2. State a few of the advantages of illustrations. Mention different kinds of illustrations and show the advantages of each.

3. What is meant by "artificial incentives?" Discuss the "prize system" as an artificial incentive.

4. "The end of school government is to secure good order." With regard to the ends of government discuss briefly the value of this statement.

5. Discuss, after White, the ends or purposes to be attained by moral instruction. Indicate how this instruction is to be imparted.

6. What are the three ends of punishment? Discuss briefly improper kinds of punishment.

Organisation, Management and Law.

1. By what means do you expect to secure the co-operation of the parents of the children who attend your school?

2. Discuss the value of assigning home-work. Illustrate your answer by reference to the subjects of Arithmetic and History.

3. (a) In what circumstances is it advisable to teach all the classes the same subjects at the same time?

(b) In what order should you purpose teaching Reading, Writing and Arithmetic during the day, and why? When should primary classes have their recitations in an ungraded school. Why?

4. Describe and illustrate a practical method of heating and ventilating rural schools.

5. (a) From the standpoint of moral instruction, (b) from the standpoint of punishment show how you will deal with any two of the following: a boy of nine uses profane language; a girl of fourteen forges an excuse for absence; a child of twelve persists in tattling to you; a girl of ten chews gum; a boy of fourteen is quarrelsome at baseball.

6. State the law bearing on: religious instruction, contagious diseases, grant for school library, conveyance of school children, duties of the principal.

Reading, Literature and Spelling.

1. (a) Discuss briefly a few of the methods employed in teaching reading in primary classes.

(b) Which do you prefer? Outline your course of procedure during the first few lessons.

2. To what extent should verbal explanation precede the oral reading of a lesson? Illustrate by reference to the following selections:

“A boom! the lighthouse gun!
How its echo rolls and rolls!
’Tis to warn home-bound ships
Off the shoals.
See, the rocket cleaves the sky—
From the fort a shaft of light!
See! it fades, and fading, leaves
Golden furrows on the night.”

3. What are the main objects to be kept in view in teaching literature in public schools? Do our authorised readers make proper provision for these?

4. Discuss the chief advantages of Supplementary Reading (a) from blackboard in junior classes, (b) from books in senior classes.

5. Teach a spelling lesson to Standard II based on the following: “But the crow looked as if he had never said a word in his life, and had never seen Tommy before. He ruffled up his black feathers, fluttered his wings, and then flew slowly across the fields to join some friends in the wood beyond.”

6. In teaching the following selection to a Standard III class indicate clearly your plan of procedure: (a) in assigning the lesson preparatory to the recitation, (b) in the detailed analysis of stanza (2), (c) in assigning seat-work after recitation.

Oh a dainty plant is the Ivy Green,
That creepeth o'er ruins old;
Of right choice food are his meals, I ween,
In his cell so lone and cold.
The wall must be crumbled, the stone decayed,
To pleasure his dainty whim:
And the mouldering dust that years have made
Is a merry meal for him.

Creeping where no life is seen
A rare old plant is the Ivy Green.

* * * * *
Whole ages have fled, and their works decayed,
And nations have scattered been,
But the stout old Ivy shall never fade
From its hale and hearty green.
The brave old plant, in its lonely days
Shall fatten upon the past,
For the stateliest building man can raise
Is the Ivy's home at last.
Creeping on, where time has been,
A rare old plant is the Ivy Green.

Grammar and Composition.

1. "Grammar is not absolutely essential although it is desirable." Explain the significance of this statement and mention advantages that result from the study of Grammar.

2. Make lesson plans showing clearly your method of teaching any two of the following: Conjunctive pronoun, case, kinds of verbs, mood, voice, infinitive.

3. *Beside your straggling fence* that skirts the way
With blossomed furze *unprofitably* gay
There in his noisy mansion *skilled to rule*
The *village* master taught his little school.

How may pupils be led to see the grammatical function of the italicised parts.

4. State the place of oral and written composition and show the relation between them.

5. Outline as definitely as possible a lesson in letter writing, Standard III.

6. Topic for composition Standard V: A skating party.

(a) Tell what work you would do preparatory to having the pupils write.

(b) Arrange suitable headings for such a composition.

(c) As a type for the class write not less than sixteen lines on one of these headings.

7. Outline a plan for conducting a writing lesson in an ungraded school.

Arithmetic and Algebra.

1. "The educational value of arithmetic is thus indicated both as concerns its psychological side and its objective practical uses in correlating man with the world of nature."—*Committee of Five.* (a) State the subjective (psychological) value of this subject. (b) How does arithmetic correlate man with the world of nature?

2. When and in what connection are the denominate numbers to be taught? Illustrate by those of time.

3. Give notes on a lesson in carrying in subtraction or outline a plan for teaching division of decimals.

4. (a) What previous knowledge should a pupil have before beginning Interest? (b) Assuming your class in possession of this knowledge make a lesson-plan for teaching the first lesson in Interest.

5. (a) What principle will guide you in the character of the problems you will give? (b) Make a three-step problem in which the following processes are used and which come in the order given: multiplication, partition, division.

6. State the principle involved in factoring $x^4 + x^2 + 1$. Outline a lesson leading to the discovery of this principle.

7. A gentleman gave some children 10c. each and had a dollar left. He found he would have required \$1 more to enable him to give each child 15c. each. How many children were there?

(a) Show how pupils may be led to pass from the data given in this problem to the equation necessary to its solution. (b) Write an acceptable solution.

8. Give four specimen questions for leading pupils to a short solution of the following equation:

$$2x - 3y = 3; 3y - 4z = 7; 4z - 5x = 2.$$

Write the answer you expect.

Geometry and Mensuration.

1. Discuss the advantages and disadvantages of Geometry as an introduction to Euclid.

2. How will you develop the following qualities of a line: position, direction and straightness.

3. Show how you will teach angle of elevation and angle of depression. Invent two problems of different types applying the above terms one of which illustrates each. Solve one of them.

4. Briefly outline how you will show that the areas of parallelogram, triangle, regular polygon and circle, may be deduced from the area of the triangle.

5. In the following problem what difficulties will pupils probably meet? Deal with each: "A school is 300 yards from A's house and 400 yards from B's. The houses are 200 yards apart. It is required to place a well equidistant from the houses and the shortest distance possible from the school."

6. A class fails to solve: Given one side of a regular hexagon, complete the figure. State what you consider the cause of failure and how you will endeavour to overcome it. Indicate an alternate method if you should be unsuccessful with your first.

7. Your class have mastered 1.23 (the construction of an angle equal to a given angle). Ask not more than five questions to lead to the solution of the following deduction: "Construct a triangle, given the base, an angle at the base and the sum of the two sides."

Geography and Elementary Science.

1. "The life of the earth springs from its slopes."—*Frye*.

(a) Show how slopes affect or determine drainage, climate, soil and productions of a continent.

(b) Outline a lesson to Standard IV on the relation between the slopes, and the drainage and industries of the North-West Territories. Sketch the maps you would use. State the presupposed knowledge you expect and the nature of the seat and homework.

2. The Programme of Studies calls for the following in Standard II: "Characteristic animals and plants in each continent. . . . the leading peoples in each."

Comment on the usefulness of this study and indicate briefly the nature of the information you will give on the animals of South America, the peoples of Eurasia and the plants of North America.

3. Briefly indicate the nature of the instruction you will give in your "out-of-school" geography excursions either to country children or to town children.

4. Write notes for a lesson on one of the following: The importance of the Great Lakes to Western Canada (Standard IV), the cross-section of North America (Standard III), or the dependence of commerce on relief (Standard V).

5. Outline a lesson on the adaptation of form and structure to the mode of life, taking as illustrations either the fish or the hen (Standard III).

6. Give notes of a lesson to pupils of Standard IV on the rotation of crops or the extermination of some noxious weed.

History.

1. (a) What are the main objects to be kept in view in teaching History in Standard II?

(b) Keeping these objects in view show how clearly your plan of

procedure in teaching a Standard II class a lesson on *one* of the following: Jacques Cartier, La Salle, Champlain, William Lyon Mackenzie.

2. In what way does the geography of a country affect its history? Give two illustrations.

3. Make a detailed outline of a series of lessons on either the Celts, the Romans, or the Saxons.

4. Show clearly how you would teach one of the following to a Standard III class.

(a) Constitutional Act of 1791.

(b) War of 1812.

(c) Rebellion of 1837.

5. State the importance of teaching "civics" in schools. Briefly indicate what might profitably be taught to pupils in Standards III and IV.

6. State the main uses of the text book in the teaching of History.

FIRST AND SECOND CLASS.

Drawing.

1. Sketch a boy (or the presiding examiner) in the attitude of walking, as seen from the right side, and having on an overcoat and cap. (Time—twelve minutes).

2. Draw the development (pattern) of a hexagonal prism, $3\frac{3}{4}$ inches high and one inch in diameter, to a scale of $\frac{1}{2}$. (Use instruments.)

3. Make a shaded drawing of a bottle, a funnel, and a tea cup, arranged in a group. State the types to which these belong.

4. Draw *either* (a) a design for a border one inch wide, and state for what it would be suitable; *or* (b) a design for a tile three inches square.

5. Illustrate *two* of the following :

(a) The leaf and seed of the maple and pine.

(b) The head and feet of a hawk and a woodpecker.

(c) "Our neighbour's barn in the offing
And the line of the new cut rail ;
The plough in her league long furrow
With the gray lake gulls behind."

(d) Cumulus, stratus, and nimbus clouds.

6. Answer *one* of the following :

(a) What means would you use to obtain hand control ?

(b) In drawing from the object, what aids would you use to obtain sizes and angles ?

(c) Mention some advantages and disadvantages in the use of the type models ?

Music.

1. Name three of the most desirable characteristics of school-singing and state how you will endeavour to obtain each.

2. Give instruction for finding the following keys from the key of C: F, Eb, A. Write the staff and signature for each.

3. (a) Write the following on the staff with the correct signature and the time names :

Key of G. $\frac{3}{4}$ | 3. $\bar{5}$. $\bar{6}$. | $\bar{7}$. -. 1. | 3. $\bar{7}$. 1. | 3. -. 5. |
 | 4. 3. 2. | 4. 3. 2. | 5. -. $\bar{7}$. | 1. -. $\bar{5}$. |
 | 3. 2. $\bar{6}$. | $\bar{5}$. 1. 4. | 3. -. 2. | 1. -. -. |

(b) What difficulties will you expect in teaching pupils to sing this from note and how will you meet each ?

4. Explain and illustrate : bar, measure, tie, accidental, natural, rest and cleff.

 FIRST CLASS.
Psychology.

1. "There can be no adequate training in the acquisition of knowledge through words which does not embrace a training of the observation and of the imagination also ; which does not go outside the field of intellectual activity and call in the aid of the feelings and of the will."—*Sully*.

Explain and justify this statement.

2. Illustrate the working of the intellectual function through the apprehension of one of these concepts: Limited monarchy, adverb. Distinguish between function and faculty.

3. Describe memory. Upon what conditions, physical and mental, does memory depend? Explain the reason for the statement: "When interest goes memory also goes."

4. State the common causes for imperfect concepts. Show how the teacher may aid the pupils in acquiring perfect concepts.

5. How does the problem of the repression or the stimulation of the feelings concern the teacher? Illustrate by reference to the feelings of anger and of sympathy.

6. "Virtue can never become a sum of habits, and for this plain reason: there is not a single good habit except the habit of being good that may not conflict with real duty at some point or other."—*Mrs. Bryant*.

Discuss this statement and show its bearing on the formation of character.

Philosophy of Education.

1. Define work. Clearly distinguish work and play, and show the effects of each upon character.
2. Briefly discuss the advantages and disadvantages of pictorial representation as a means of instruction.
3. "Education can only lead and assist; it can not create."
"The end and aim of education is the emancipation of the youth."
In regard to the "limits of education" tell the importance of each of the above statements.
4. "The organisation of a school will be determined in its detail by its peculiar aim."
Describe after Rosenkranz what should be embodied in the organisation of a school.
5. What is habit? Distinguish active and passive forms of habit. What are the advantages of habit in education?
6. State the views held respectively by Spencer and Rosenkranz in regard to self-instruction. Briefly criticise these views.

History of Education.

1. State the governing principles of the Passive System of Education. Discuss briefly its three phases.
2. Describe in a general way the Practical Education of the Romans.
3. What was the influence of Pestalozzi on modern education? Show his relation to Rousseau.
4. Briefly tell what Froebel has contributed to the advancement of education.
5. Describe the work of Comenius under the following heads:
 - (a) Aim.
 - (b) Method.
 - (c) System of schools.
 - (d) Subjects of Study.

Organisation, Management and Law.

1. On what principles and by what tests will you determine the fitness of pupils for promotion?
2. There is a distinction between a noisy school and a disorderly one; a scholar may be submissive and yet not obedient; mannerly and yet not moral.
 - (a) Explain and discuss each of these statements in its bearing on school work.
 - (b) By what tests would you determine whether a school is well governed?

3. (a) From the standpoint of moral instruction, (b) from the standpoint of punishment, show how you will deal with any two of the following: a girl of fourteen forges an excuse for absence; a boy of ten carries and lights cigarettes while you are absent at noon; a child of eleven tattles to you; a boy of seven plays truant.

4. Mention the most important points to be kept in view in the construction of a time table.

5. What do you consider the work of a principal of a school in the classification, promotion, attendance and government of pupils?

6. State the law bearing on: Payment of salary for summer holidays, contagious diseases, use of languages other than the English, conditions and use of the Inspector's grant.

Reading, Literature and Spelling.

There was a sound of revelry by night
 And Belgium's capital had gathered then
 Her beauty and her chivalry, and bright
 The lamps shone o'er fair women and brave men;
 A thousand hearts beat happily; and when
 Music arose with its voluptuous swell,
 Soft eyes looked love to eyes which spake again,
 And all went merry as a marriage bell;
 But hush! hark! a deep sound strikes like a rising knell.

Did ye not hear it? No; 'twas but the wind,
 Or the car rattling o'er the stony street.
 On with the dance! let joy be unconfined;
 No sleep till morn when Youth and Pleasure meet
 To chase the glowing hours with flying feet—
 But hark! that heavy sound breaks in once more,
 As if the clouds its echo would repeat;
 And nearer, clearer, deadlier than before!
 Arm! arm! it is—it is the cannon's opening roar!

Within a windowed niche of that high hall
 Sat Brunswick's fated chieftain; he did hear
 That sound the first amid the festival,
 And caught its tone with death's prophetic ear;
 And when they smiled because he deemed it near.
 His heart more truly knew that peal too well
 Which stretched his father on a bloody bier,
 And roused the vengeance blood alone could quell:
 He rushed into the field, and, foremost fighting, fell.

1. (a) State the main objects to be kept in view in teaching literature.

(b) Describe in detail the method you would adopt in dealing with the above stanzas as a literature lesson with a Standard IV class.

2. (a) How do you intend to secure intelligent expression in reading?

b Tell clearly what steps you will take in order to secure the proper oral rendition of lines 1-6 in stanza 2.

3. Mention three rhetorical figures found in stanza 2. Show by what means you will lead pupils to see their force and appropriateness.

4. Discuss the advantages and defects of any three plans for teaching reading in primary classes. State which you prefer and give your reasons.

5. State, according to Laurie, the relation of Literature to moral, aesthetic and religious training.

6. (a) Use stanza 1 to exemplify your plan for conducting a dictation exercise.

(b) Account for much of the faulty spelling in schools? What means do you intend to employ in your school in order to produce good spellers?

Grammar, Composition and Writing.

1. Distinguish between language as a *formal* study, as a *real* study, and as an *art* study.

2. In regard to language as a formal discipline state according to Laurie (a) when grammar should be taught, (b) how much should be taught, (c) the method of procedure.

3. Outline lesson plans on any *two* of the following: Case, infinitive, subjunctive mood, complex sentence, adverbial phrase.

4. In teaching the language arts in the lower grades discuss the importance of (a) conversation lessons, (b) object lessons, (c) memorising selections of poetry.

5. Outline as definitely as possible how you would teach a "business letter" to a Standard IV class.

6. (a) State your plan of procedure in preparing a Standard V class for writing a composition on "A Winter Evening."

(b) Write at least sixteen lines on this topic.

Arithmetic and Algebra.

1. "The conference recommends that the course in arithmetic be abridged in omitting entirely those subjects which perplex and exhaust the pupil without affording any really valuable discipline."—*Committee of Ten.*

Mention the subjects which should be curtailed or entirely omitted. State the reasons in each case.

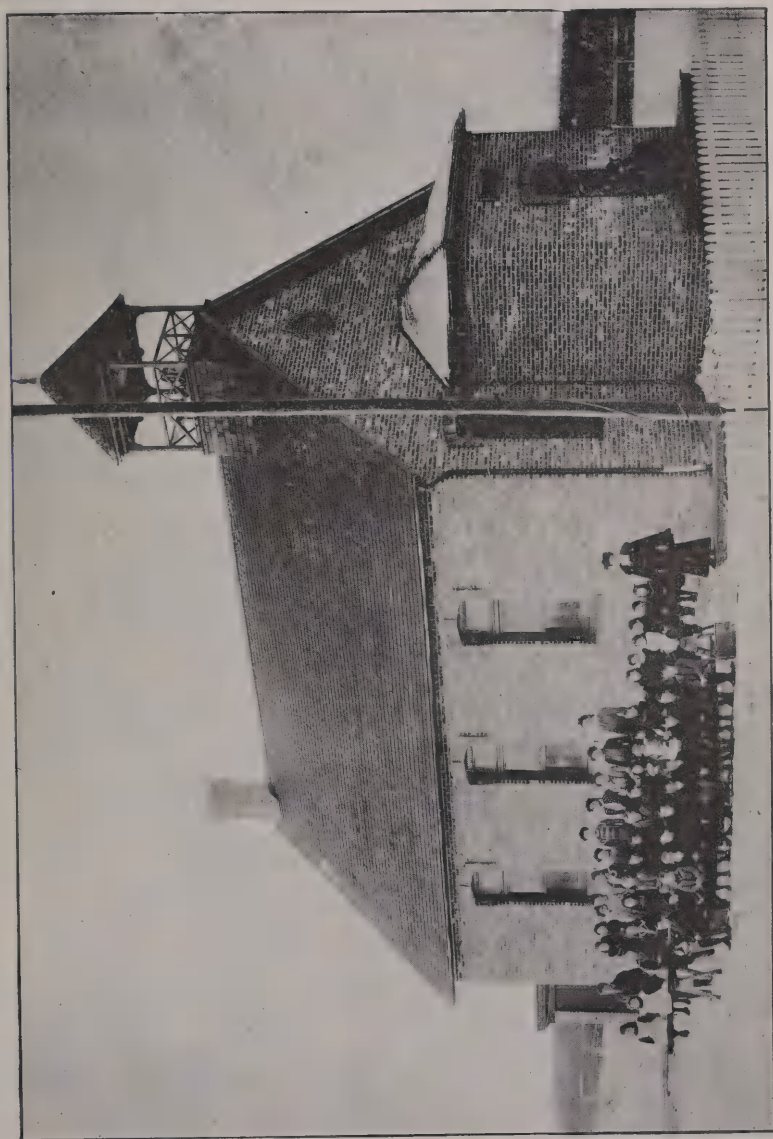
2. (a) Outline the method you will use in teaching pure number after the objective stage is over. (b) Give in order the facts you will teach about the number 24.

3. (a) At what stages and in what way are fractions first used? (b) Give notes on your first lesson on addition of fractions in Standard III.

4. Discuss the necessity for facility and correctness of work in



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arithmetic showing to what degree these qualities should be exacted and how you purpose obtaining them in public school standards.

5. A merchant sold 135 barrels of flour, part at \$5 a barrel, and the remainder at \$4 a barrel. If he realised \$615 how many barrels did he sell at each price?

Give an outline for an introductory lesson on this type of question. Write out an acceptable solution.

6. "Oral exercises in Algebra, similar to those in what is called 'mental arithmetic' are recommended."—*Committee of Ten*. Illustrate the nature of these exercises.

7. How would you proceed in teaching the following identities without multiplication?

$$(a-b)^3 + 3b(1-a)^2 + 3b^2(1-a) + b^3 = 1 - 3(a-b) + 3(a-b)^2 - (a-b)^3$$

8. How should you proceed in teaching the principle of transportation in the solution of an equation?

9 Write out the problem of which the following is the algebraic statement: $x + y = 140$; $\frac{1}{2}x - 10 + \frac{2}{3}y + 5 = 75$.

Geometry and Mensuration.

1. (a) State the chief differences between the methods of teaching Geometry and Euclid. (b) Indicate the nature of the introductory lessons in each subject.

2. Write notes for a lesson on the development of the concept of an angle. Show the nature of the seat work that should follow.

3. Arrange a series of not more than six questions that would suggest to a class a method of constructing a circle three times as large as another circle.

4. A ball 12 feet in diameter surmounts a pillar 70 feet high. A man whose eye is 5 feet above the ball stands on it. How many square metres on the plane at the foot of the pillar are hidden from him?

(a) What probable difficulties will a pupil meet in the solution of this problem? (b) Show how you will help him. (c) Write out an acceptable solution.

5. Outline a lesson plan for obtaining the rule for finding either the contents of a cylinder or the surface of a right cone. Construct a problem to be solved by this rule. Solve it.

6. Your pupils have mastered 1, 12. (To draw a straight line perpendicular to a given straight line from a given point without it.) You give as a deduction the following: "Two points are situated on opposite sides of a given straight line. Find a point in the line such that the straight lines joining it to the two given points may make equal angles with the given line." Write out the questions you will ask to lead them to a solution.

7. State the general principles that will guide you in leading your pupils to attack a theorem in Euclid.

Geography and Elementary Science.

1. "Man and nature, man in nature, not man alone or nature alone, are the true subjects of interest in geography."—*Butler*.

(a) Show the force of this statement. (b) How does this truth bear on your treatment of (i) Africa, (ii) Ocean Currents, (iii) The Industries of Canada.

2. Indicate the subjects and main subdivisions of a series of lessons on "The World as a whole," showing the standard in which the instruction is given.

3. (a) State the aims of weather-observation and illustrate the means you would employ in Standards I, II and III.

(b) Outline the observations you might make of sun-shadows in Standard II. Show how the knowledge gained from such observation may afterwards be used in more advanced work.

4. Arrange a series of topics to cover the continent-study of North America (Standard III). Account for the order of development and indicate the amount of instruction you will give on each subject.

5. Give an outline of a lesson to Standard V on the relations between the locations of centres of population and the districts to which they minister.

6. Write notes of a lesson to Standard IV on how moisture is conserved through the processes of tillage.

7. (a) Outline a lesson on the relation of the colouring of animals to their surroundings or the dissemination of seeds. (Standard III).

(b) Show the value of Nature Study which this lesson illustrate.

History.

1. Discuss briefly the value of history in regard to (a) training in citizenship, (b) training in judgment, (c) training in character.

2. Show the importance of associating the study of history with geography. Illustrate by reference to the British Isles.

3. Outline clearly your plan of teaching *one* of the following to a Standard V class:

(a) The War of 1812-14.

(b) The Constitutional Act of 1791.

(c) The Struggle between King and Parliament in the Stuart Period.

4. Write notes of lessons on any *two* of the following: La Salle, Champlain, Frontenac, William Lyon Mackenzie, Simon de Montfort (Standard III).

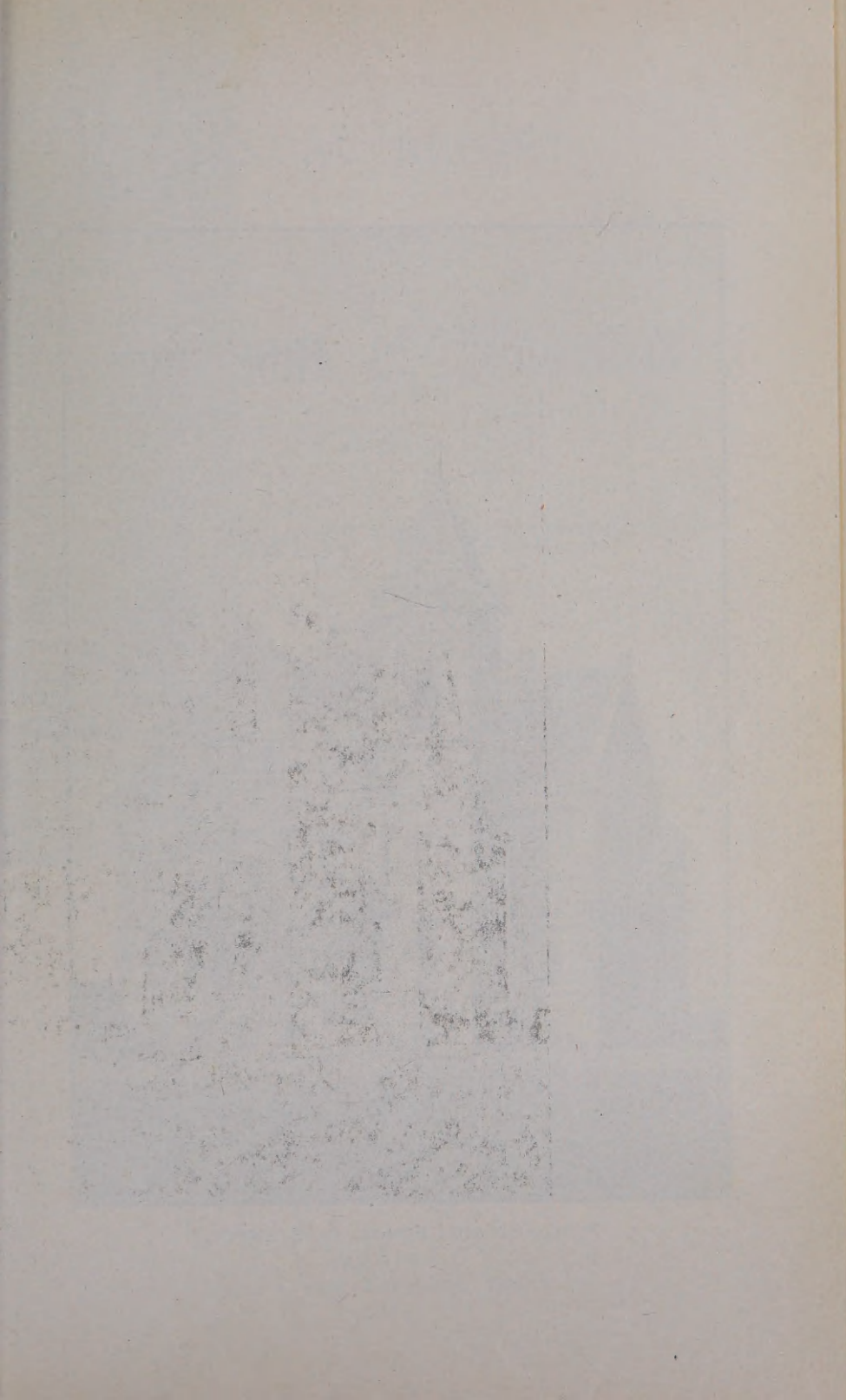
5. What advantages result from a comparative study in History? Justify your answer by reference to any one of the following:

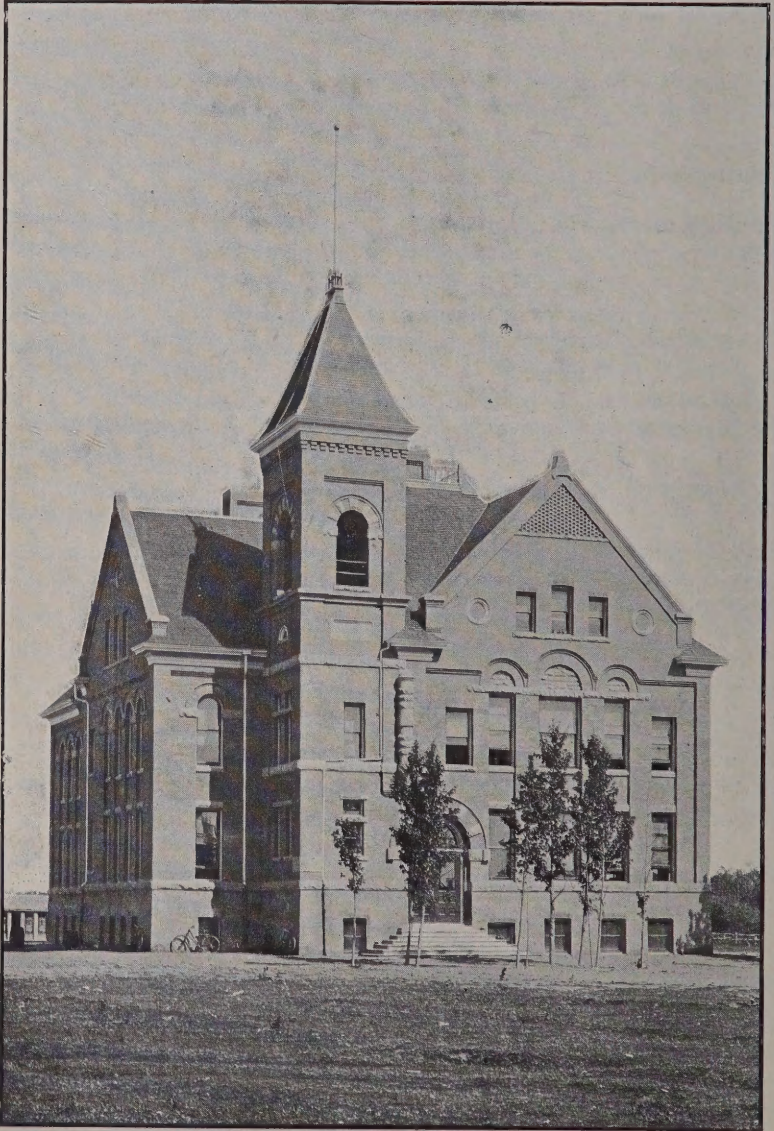
(a) Union Act of 1707 with Confederation Act of 1867.

(b) Elizabeth, with Victoria.

(c) Boer War with American War of Independence.

6. Suggest a suitable outline for the "intensive study" of the Tudor Period. What are the advantages and disadvantages of this form of historical study?





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