SUPPLEMENT

TO THE

NEW ZEALAND GAZETTE

OF

THURSDAY, OCTOBER 8, 1891.

Published by Authority.

WELLINGTON, WEDNESDAY, OCTOBER 14, 1891.

"The Education Act, 1877."—Inspection and Examination of Schools.

ONSLOW, Governor.

ORDER IN COUNCIL.

At the Government Buildings, at Wellington, this twelfth day of October, 1891.

Present:

THE HONOURABLE THE PREMIER PRESIDING IN COUNCIL.

IN exercise and pursuance of the powers and authorities vested in him by "The Education Act, 1877," the Governor, with the advice and consent of the Executive Council of the colony, doth hereby make the following regulations for the inspection and examination of schools; and, with the like advice and consent, doth order that the same shall come into force on the thirty-first day of December, one thousand eight hundred and ninety-one, and that on the said date all previous regulations upon the same subject shall be cancelled:—

INSPECTION OF SCHOOLS AND STANDARDS OF EXAMINATION.

1. Once in every year every public school shall be both inspected and examined by a Public School Inspector. If possible, there shall be an interval of some months between the inspection and the examination. As soon as possible after the inspection the Inspector shall present an "inspection report," and as soon as possible after the examination an "examination report." In these regulations a year means a year beginning with the 1st of January; and an Inspector's annual return must relate strictly to a year as thus defined.

2. The inspection report shall relate to such topics as the following:—

I. List of standard classes and teachers; II. Remarks on the organization, as shown under Topic I.; III. Suitability of time-tables; IV. Remarks on the methods and quality of the instruction in general or in detail; V. Order and discipline, and the tone of the school with respect to diligence, alacrity, obedience, and honour; VI. Supervision in recess; VII. Manners and general behaviour of the pupils; VIII. State of buildings, ground, and fences; IX. Sufficiency of school accommodation; X. Cleanliness and tidiness of rooms and premises, including outside offices; ventilation and warming; XI., &c. Other topics.

The report shall be divided into sections, and the section relating to any topic in the foregoing list shall bear the number assigned to that topic in the list. The omission of any number shall be sufficient to indicate that the Inspector does not deem it necessary to report on the topic corresponding to that number. Section I. shall in no case be omitted from the report: it shall show what "standard classes" within the meaning of Regulation 4 there are in the school, whether the standard classes are grouped in classes for instruction, and, if so, how they are grouped, and by what teacher each class is taught, describing each teacher by his position in the school as "sole teacher," "headmaster," "first assistant," "third-year pupil-teacher," or as the case may be. Any section except section I. may, if the Inspector so choose, consist of the appropriate number and of a single word, such as, "satisfactory."

3. The examination report shall show the number of pupils presented in each standard class, the number of "passes" in each standard, of failures in each class, of "exceptions" in each class, and of pupils absent from each class, the "percentage of passes," the "percentage on class-subjects," the "additional marks," and the character of the work done in classes P and S7. The terms used in this regulation shall be used in the examination report in the sense in which they are used in these regulations.

4. For the purposes of inspection and examination, but not necessarily for purposes of instruction, the pupils of every public school shall be divided into standard classes, as follows: The preparatory class shall include all pupils below Class I., and may be called Class P. Class I. shall include all the children preparing for or presented for Standard I., and may be called S1; Class II. shall include all the children preparing for or presented for Standard II., and may be called S2; and so on to Class VI. Class VII. shall include all pupils that have passed the Sixth Standard, and may be called S7. If necessary, Class P may be divided, the lower part being called P1, and the next P2. For purposes of inspection and examination every pupil in the school must be considered to belong to one of the *standard* classes as here defined, but for purposes of instruction the principal teacher of a school shall have full discretion to arrange his pupils in different classes for different subjects, according to their ability and proficiency with respect to the several subjects and according to the number of available teachers, and also to cause the children of two or more standard classes to be gathered into one class for instruction in any subject; and if any pupil by reason of special ability or proficiency in any subject receives in such subject the instruction proper to a higher *standard* class than that to which he is considered to belong he may in such subject be examined with the higher class in which he has been placed for instruction, and if, being so examined, he satisfies the examiner his success shall be reckoned towards his "pass" in his proper *standard* class. Also, at the discretion of a principal teacher, a pupil may be promoted to a higher standard class though he has failed at the examination in the work of the standard for which he was last presented.

5. At every standard examination the head-teacher shall present all the pupils on the school-roll, by giving the Inspector a list for each standard class, containing the names of all the pupils belonging to the class, and a schedule showing that the sum of the numbers of names in all the lists is identical with the number of the pupils on the school-roll. Against the name of every pupil who has already passed a standard the head-teacher shall enter in the class-list the number of the highest standard which the pupil has passed. Whenever a child more than eight years old is presented in Class P the principal teacher shall give the Inspector a written explanation of the reason for not presenting the child in Standard I., and the Inspector shall include in his annual report to the Minister a statement of his opinion with respect to the number of such cases and the sufficiency of the reasons assigned for them.

6. Against the name of any pupil who, during the three quarters preceding the quarter in which the examination takes place, has been as often absent as present, the head-teacher may write the number of the attendances of such pupil during the three quarters; and such pupil, if he do not pass for the standard for which he is presented, shall not be deemed to have failed, but shall be considered "excepted," and shall be included by the Inspector in the number of "exceptions" reported.

7. In order to obtain a pass, a pupil must be presented for a standard which he has not already passed, must be present in class during the examination in the class-subjects, and must generally satisfy the Inspector in the pass-subjects for the standard.

8. As soon as possible after the examination of a school the head-teacher shall be furnished with the names of the pupils who have passed the several standards, and shall record the passes in the Admission Register, and issue to every pupil who has passed a standard a certificate

of pass in that standard; and every pupil removing from one public school to another shall be required on entering to exhibit his latest certificate to the head-teacher, who shall make a record of the certificate in the Admission Register, and shall not present the pupil for examination for the standard to which such certificate relates.

9. The "percentage of failures" at every examination shall be ascertained by dividing the number of failures by the number of passes and failures taken together and multiplying by 100.

10. The "percentage of passes" at every examination shall be ascertained by dividing the total number of passes by the number of pupils on the school-roll, and multiplying by 100. The use of the term "percentage of passes" in any other sense than that in which it is used in this regulation is hereby declared to be highly reprehensible. A low "percentage of failures" may be secured by holding pupils back in their course until they are sure to do well at examination. A high "percentage of passes" is an indication of rapidity of progress, while a low "percentage of failures" may indicate an excess of prudence on the part of the teachers. The combination of a high "percentage of passes" with a low "percentage of failures" indicates high efficiency so far as the "pass" subjects are concerned. It must be understood that a school that includes an infant department will always and necessarily show a lower "percentage of passes" than that which may reasonably be looked for in a school which is relieved of the care of the younger pupils by the presence of an independent infant school in the neighbourhood.

11. The Inspector shall ascertain "the percentage on class-subjects" by assigning marks for each class-subject, according to a scale ranging from 0 to 100, to express his judgment upon the quality of work done in that subject, and then calculating for all the class-subjects the mean of the marks so assigned. For the purpose of this regulation elementary science, together with object-lessons and lessons in natural history, manufactures, and common things, shall be counted as one subject; grammar as one subject; history as one subject; and geography, so far as it is a class-subject, as one subject. In assigning marks for any class-subject, the Inspector shall consider whether the subject is attended to in all the classes for which it is prescribed, and also whether it is efficiently treated. It is not to be expected that a small school with only one or two teachers will always be able to obtain very high marks for "class-subjects." It is recognised that the degree of thoroughness with which these subjects are taught must depend to a large extent on the amount of teaching power available, and that in this respect the results obtained in any school must be compared with the results obtained in other schools comparable in advantages; yet these subjects must always receive a due measure of attention, and the neglect of any one of them will be regarded as highly censurable.

12. The Inspector shall ascertain the "additional marks" by assigning marks on a scale ranging from 0 to 20, to express his judgment of the value of the work done by the school in each of the "additional subjects," and then adding together the marks so assigned. For the purposes of this regulation, repetition and recitation shall be reckoned as one subject, disciplinary exercises and drill as one, singing as one, needlework as one, and knowledge of the subject-matter of reading-books as one. In assigning marks for any "additional subject" the Inspector shall consider whether the subject is attended to in all the classes for which it is prescribed, and also whether it is efficiently treated. In the largest schools any neglect of these subjects is to be regarded as a ground of reproach; and, on the other hand, any good work under this head done in small schools will be accepted as evidence of praiseworthy zeal and efficiency.

13. Every Inspector shall make an annual return, showing with respect to each public school subject to his inspection the number of pupils presented, the number passed, the percentage of passes, the percentage of failures, the percentage of class-subjects, and the additional marks, and stating in brief, with respect to each school, its condition as to order and discipline, and as to the manners of the pupils. The Inspector shall at the same time make a return relating to the same schools and the same pupils, showing the total number of pupils presented in each of the standard classes, as defined in Regulation 4, the total number passed in each standard, the total number of failures in each standard, and the total number of exceptions for each standard. If possible, the return shall include a statement of the average age of the pupils on passing each standard.

14. The standard syllabus shall not be understood to prescribe to the teacher the precise order in which the different parts of any subject shall be taught, nor to prohibit the teacher from giving instruction not prescribed by the syllabus, but shall be taken to represent only the attainments of which the Inspector may expect full proof at the several stages

of a pupil's progress; also it is to be understood that the examination report and inspection report, taken together, and not either of them alone, will express the Inspector's full judgment on the character and efficiency of the school.

15. The Inspector shall be at liberty to conduct the examination of a school in his own way—by written papers, or *viva voce;* by putting all the questions himself, or allowing the teacher of a class, or the head of a school or of a department, to put all the questions or some of them; by subjecting each pupil in a class to a separate examination, or by putting questions to the several pupils in the class in rotation, and letting them "take places" or marking the values of their individual answers; and so on. In the exercise of his judgment in such matters, the Inspector will, of course, have regard to the different characters of the several subjects, and will remember that methods properly applicable to the examination of boys and girls of fourteen may be quite out of place in the case of children of eight or nine.

16. In the interpretation of the syllabus, inspectors and teachers will be guided by the following statement of its design, and of its aims in general and in detail. It is designed to regulate the instruction and the examination of pupils in *primary* schools, most of whom are *children*, and the oldest of them in the stage of *early youth*. When terms are used in defining the subjects of primary school instruction that are also used in defining parts of an examination for teachers, it is not expected that the children will be able to attain to such a mastery of these subjects as it is necessary for their teachers to have. Questions that would be fair in a degree paper might be quite unfair if proposed in the same subject to candidates for matriculation; and the children of a third-standard class may have some useful elementary knowledge of matters that, in some aspects, are occupying the diligent attention of specialists in modern science. The profitable instruction of children and youths is naturally limited by their intelligence—childish intelligence or youthful intelligence, as the case may be; any teaching that does not keep within the limits thus prescribed by nature is worse than useless, and examination that does not respect these limits is unreasonable. On the other hand the chief end of the instruction imparted in the primary school is the exercise and development of the pupil's intelligence, and the employment of it in the acquisition of useful knowledge. If any part of the syllabus seems to indicate a tendency to encourage what is mechanical or superficial at the expense of intelligence, it is only because, through some defect in the letter, the spirit and the real meaning have not been as clearly manifested as they ought to have been.

The subject-matter of all READING lessons, and especially of passages used as examination tests, must be such as the pupils under instruction or examination can easily understand, and the Inspector will not be satisfied with any reading that does not convey to his mind the assurance that the pupil does understand the passage read. Mere utterance of the printed words will not suffice; there must be such intonation and emphasis as are required to express the meaning and spirit of the passage: this must be insisted on, even in the first standard. Proper emphasis and tone proceed naturally from a true apprehension of the meaning, and are not acquired by following arbitrary and artificial rules. A first-standard pupil is capable of feeling the simple humour or the simple pathos of a simple story, and of understanding the point of it, and his feeling and understanding will affect his utterance as naturally in reading as in free speech, unless he has been educated into a false manner by being frequently set to read unsuitable matter, passing his comprehension and containing nothing to interest him. In the upper standards the quality of the reading affords one of the surest means of judging of the intelligence of the pupils, and of the degree of culture to which they have attained. The good readers will not be those who never read except in class, but those who have formed the habit of private reading; who can follow with ease the relations of the parts of a complex sentence, the thread of a simple argument, or the plot of an interesting story; who know how to employ in their own spoken and written composition relative sentences and concessive conjunctions; to whose understanding every turn of thought and expression appeals with familiar force; and who, because their thought and feeling respond to every reasonable demand made upon them by the writer, are able to make his meaning their own for the time being, and to make that meaning clear by appropriate tones of voice. Such readers will be independent of mechanical rules for the observance of "stops." Their reading will be rhetorical in the best sense, though not histrionic. They will be more indebted to their teacher for the correction of false habits than for the formation of a correct style, for a correct style consists chiefly in the use of turns of voice that are not conventional but perfectly natural, depending only on an adequate conception of the writer's spirit and meaning. There is no need to question

really good readers to ascertain whether they understand what they are reading, except perhaps with regard to the meaning of an obscure word here and there; the good reading is sufficient proof of the intelligence of the reader. It must, however, be remembered that a child's understanding of a passage may be good as far as it goes, and may yet be naturally limited by the inexperience natural to his years, so that his reading will not give full expression to the utterance of sentiments of passionate desire, disappointed ambition, or overwhelming grief, although it may indicate an elementary appreciation of them.

In SPELLING, the intelligence of the child should be directed, in the first place, to the recognition of the phonetic values of the letters, and for that reason words of peculiar formation should not be used as tests for the first standard. When the phonetic values have been well established in his mind the pupil is capable of intelligent observation of anomalous forms; at a further stage he can appreciate the reasons for different ways of adding inflectional and other terminations; and still later he may come to see how the derivation of words affects their orthography.

WRITING and DRAWING are not to be regarded as merely mechanical and imitative arts. The pupil should from the first be taught to observe the constituent parts of the letters he has to write, the method of joining the several parts of a letter and the several letters of a word, the slope of his copy, and the due spacing of the whole; so that he may have not a vague and general idea but a clear and precise conception of what he is expected to reproduce. In this exercise, as well as in drawing, the training is partly for the eye and partly for the hand; but it ought also to do something for the brain which keeps them in relation. The earliest drawing-lessons will be found to require more intelligence than most young children are at first disposed to bestow upon them. The teacher soon discovers that they have very indefinite ideas of a straight line, of a square, of a circle. They may know that a square has four sides, but their intelligence has to be aroused to observe and recognise the equality of the sides and the sensible character of a right angle; they may know that a circle has no corners, but the perfect symmetry will escape their unaided notice. One great advantage of drawing is that it develops the sense of proportion; operating perhaps more immediately through the eye in the case of free-hand drawing, and in the case of geometrical drawing and perspective operating more immediately through the understanding. This sense of proportion is what is most required for the appreciation of arithmetical and physical problems, and it has unlimited applications to the concerns of daily life—even to dressmaking and cooking. Upon many of the practical arts drawing has a still more direct bearing, and to the skilled artisan of the future a knowledge of it will be indispensable.

In these regulations more prominence is given to English COMPOSITION than to English GRAMMAR. It is not possible to define separate stages of progress in composition as clearly as in grammar; it is therefore necessary to leave a great deal to the discretion of the Inspector. The Inspector will ascertain from the teacher what plan is followed in the teaching of composition, and will as far as practicable adapt his examination to that plan; but where he finds the system of instruction unsatisfactory and ineffective he will indicate its defects and suggest improvements, and he will do his utmost to prevent any continuous and persistent neglect of the subject. In setting an exercise in composition the Inspector will be careful to choose a subject of which it is certain that the children have considerable knowledge; or he will read a passage, or recite a narrative, or in some other way supply them with suitable material for composition. The teacher should habitually correct defects of composition as they occur in the ordinary speech of the pupils, and in their written exercises. Correct speech and good composition depend more on practice and habit than on a knowledge of rules of grammar and composition. The principal use of grammar is not to teach the art of speaking and writing correctly; that art is acquired by familiarity with good models, and by practice subject to criticism and correction; and, with respect to the acquisition of the art, the function of grammar is the subordinate function of criticism. The great value of grammar depends on its character as a science of elementary logic, as a study of the forms in which the processes of thought stand revealed. In this aspect it plays a very important part in the development of intelligence, and is pregnant with suggestions that may guide the pupil into ways of philosophical thought when his school days are over. It is, moreover, a science of classification, and among the classificatory sciences it has this advantage: that there is no need to go far afield to find the objects of it; they are accessible always and to every one, being the thoughts of our own minds and the words of our own lips. In grammar and analysis the Inspector will employ, as tests or exercises, plain and

straightforward sentences, usually short, and words that have quite unambiguous functions.

In ARITHMETIC the tests of the work of any standard should consist of easy examples of that work, and should always comprise easy problems therein, excluding, except in the fifth and sixth standards, problems involving the use of more than one principle; and exercises intended to test skill and rapidity in the manipulation of figures should be set only in parts of the subject that are certainly familiar and easy to the pupil.

In HISTORY the pupils will not be required to learn more than about a dozen dates, or to answer questions on more than about twenty-five persons and events, for any one standard; nor will they be expected to trace the remote causes, or even to remember the proximate causes, of great events. What is wanted is a clear view of a few prominent persons and salient facts so exhibited as to afford glimpses of the conditions in which our ancestors lived at successive periods of our national history, and to establish in the mind an outline that may be filled in by later reading. A child may have a vivid idea of royal authority prone to excess, and of the status of a baron, and of the political insignificance of the common people at the beginning of the thirteenth century, without knowing the contents of Magna Charta, or all the incidents of feudal tenure. The manner in which the whole outline is treated in the definition of history for the third standard is an indication of the bold and general treatment contemplated by the Department in prescribing periods for study in the later standards.

The ELEMENTARY SCIENCE prescribed in the syllabus is called "elementary science" because that term is used in "The Education Act, 1877;" its scope is often misunderstood by critics of the Act and of the syllabus, who think that the children are being "crammed with all the 'ologies." But the term is to be taken as denoting such a knowledge of conspicuous natural phenomena as constitutes a general basis of the particular knowledge of separate sciences. Children are capable of understanding why a scientific man does not regard a whale as a fish, or a spider as an insect. A few well-chosen experiments will suffice to give them a definite idea of the difference between chemical combination and mechanical mixture. A few other experiments with a cheap and simple galvanic battery and an electro-magnet will afford means of explaining to them in a very useful if not a very complete way the operation of the electric telegraph. Instruction of this kind suited to their present stage of development will serve to enlarge their conceptions of the world and to quicken their intelligence—perhaps to stimulate a profitable curiosity, and to create in some young minds a bias towards scientific pursuits. Ohms and volts, atomic weight, the vascular system, and such high matters in general, are out of the reach of the ordinary primary-school pupil, however desirable it may be that the teacher have some real knowledge of them.

In examining in elementary science, or in the subject-matter of object lessons and natural-history lessons, or in geography and history, the Inspector may, if the teacher presents a book containing the notes of the lessons that have been actually given, base his examination on the contents of the note-book. He may also inspect any exercise-books in which the pupils have entered composition exercises founded on the lessons they have received on these subjects.

In GEOGRAPHY the Inspector may require the children to point out on the map the places that they ought to know, and this with respect not only to places named in their geography lessons, but also with respect to places referred to in the lessons on history, on animals, on natural products, and on manufactures. The importance of bringing the several parts of the school course into mutual relation in this way cannot be overestimated; the degree of success attained by the principal teacher in his endeavours to establish such a correlation of parts should weigh heavily with those who are called upon to form an estimate of his skill and efficiency, and upon it will depend in a high degree the development of the intelligence of his pupils.

17. It is to be remembered that in many ways the examination of a school has an important bearing on the morals of the children. They should be made to feel and understand that the Inspector is not a severe and frowning critic bent on probing their ignorance and finding opportunity to put them to shame, but that he comes as a courteous and gentle friend, who will use his best skill to put them at their ease, and will invite them to give him proof of their diligence and let him see what progress they are making; and they should be taught to despise all showy tricks and arts of evasion, to show themselves frank and simple, and to avoid everything that is not in accordance with the strictest principles of honour.

18. The syllabus of pass-subjects, class-subjects, and additional subjects for each of the standards shall be the following:—

STANDARD I.

1. Pass-subjects.

Reading and Comprehension.—Short stories, fables, verses, &c., well within the comprehension of the youngest readers, and not containing rare words or long words. As a rule the words of more than one syllable should be only such as are formed by inflection from short words, or names of familiar objects—persons, well-known animals, birds, rooms, meals, &c. The children must be able to read the sentences with intonation indicating a sufficient grasp of the meaning.

Spelling.—Easy words of one syllable, and longer words in most familiar use and of quite regular formation (*sister*, for example, but not *daughter*).

Writing.—The small letters and the ten figures, on slate, at dictation.

Arithmetic.—Counting, and oral addition by twos, threes, fours, and fives, up to 100; numeration and notation to 999; addition sums of not more than three columns; multiplication of numbers not exceeding 999 by 2, 3, 4, and 5; relative values and chief aliquot parts of current English coins; and relative lengths of the yard, foot, and inch. The numeration must be applied to the addition and multiplication, and the multiplication known to be a compendious method of addition. The Inspector should satisfy himself that, within the limits of three places, the *idea* of the decimal notation is fully established. The examination is not to be confined to set sums, but must include concrete examples of a very simple kind, such as—there are 14 children in one class and 19 in another, how many are there in the two classes? or, John has 31 marbles and Thomas has just 4 times as many, how many has Thomas? or, there are 20 shillings in a pound, how many are there in £3?

Drawing.—Straight lines, rectilineal angles, simple rectilinear figures, and patterns—as defined in Regulation 20.

2. Class-subjects.

Object and Natural-History Lessons.—A syllabus of the year's work done to be given to the Inspector, who will examine the class upon some object or objects selected from the syllabus, or allow the teacher to examine.

3. Additional Subjects.

Knowledge of the Subject-matter of the Reading Lessons.

Repetition of Easy Verses.—Syllabus and test as for object-lessons.

Singing.—A sufficient number of easy and suitable songs in correct time and tune, and at a proper pitch.

Needlework and Drill.—See Regulations 25 and 12.

STANDARD II.

1. Pass-subjects.

Reading and Comprehension.—More difficult matter than is required for Standard I., but still well within the comprehension of ordinary children at the age of nine. The pupils will be expected to answer questions on the meaning of the more difficult words in the passage read, but not to give strict definitions. They will also be expected to show that they have understood, and that they remember the substance of the same passage.

Spelling.—Words of one and two syllables, including words containing silent letters or other peculiarities, and easy words of three syllables.

Writing.—Short words, in copy-books, not larger than round-hand. On slate: Capital letters and transcription from reading-book of Standard II.

Arithmetic.—Numeration and notation of not more than six figures; addition of not more than six lines, with six figures in a line; short multiplication, and multiplication by factors not greater than 12; subtraction; division by numbers not exceeding 12, by the method of long division, and by the method of short division; mental problems adapted to this stage of progress; multiplication tables to 12 times 12; relative values and chief aliquot parts of the ton, hundredweight, quarter, stone, and pound; relative lengths of the mile, furlong, chain, and rod.

Drawing.—The same kind of work as for Standard I., but more advanced, and with the addition of simple curvilinear forms—as defined in Regulation 20.

2. Class-subjects.

Geography.—Knowledge of the meaning of a map; of the principal geographical terms; and of the positions of the continents, oceans, and larger seas.

Object-lessons, and Lessons in Natural History and on Manufactures.—A syllabus, as in Standard I.

3. Additional Subjects.

Knowledge of Subject-matter of Reading Lessons.

Repetition of Verses.—Syllabus showing progress.

Singing.—Songs as before; the places of the notes on the stave, or the symbol used for each note in the notation adopted; to sing the major diatonic scale and the successive notes of the common chord in all keys.

Needlework and Drill.—See Regulations 25 and 12.

STANDARD III.

1. Pass-subjects.

Reading.—Easy reading book, to be read fluently and intelligently, with knowledge of the meanings of the words, and with due regard to the distinction of paragraphs as well as of sentences. Insufficient apprehension of the value of the paragraph is not to affect the individual pass, but the Inspector will not be satisfied with the class if he finds that this defect is general.

Spelling.—From the same book; knowledge of words having the same, or nearly the same, sound, but differing in meaning; dictation of easy sentences from the reading-book of a lower standard. Dictation is not prescribed for Standards I. and II., because of the serious danger which attaches to the dictation exercise used prematurely. If a child writes incorrectly, his visual memory is affected by his error. On the other hand, transcription is continued in this standard (under the head of writing), because it affords no excuse for mistakes, and allows the teacher or examiner to expect and demand precision; and, besides, it ensures familiarity with the use of punctuation marks and capital letters.

Writing.—Longer words and sentences, not larger than round-hand; transcription from the reading-book of Standard III., with due regard to punctuation and quotation marks.

Arithmetic.—Numeration and notation generally (one billion being taken as the second power of one million, one trillion the third power, and so on); long multiplication and long division; the four money rules, excepting long multiplication of money; tables of money, avoirdupois weight, and long measure; and easy money problems in mental arithmetic.

Composition.—Very simple exercises to test the pupils' power of putting their own thoughts on familiar subjects into words.

Geography.—The names and positions of the chief towns of New Zealand; the principal features of the district in which the school is situated; names and positions of Australian Colonies and their capitals; of the countries and capitals of Europe; of well-known mountains; and of celebrated rivers. The mountains and rivers named in the following lists will suffice: Pyrenees, Alps, Apennines, Carpathians, Balkan, Vesuvius, Etna, Hecla; Ural, Caucasus, Altai, Himalayas, Hindu Kush, Thian-Shan; Atlas, Kilimanjaro, Ruwenzori; Rocky, Sierra Nevada, Alleghany, Popocatepetl; Andes, Cotopaxi; Australian Alps; Egmont, Ruapehu, Cook. Thames, Seine, Rhine, Rhone, Elbe, Danube, Tiber, Volga; Nile, Niger, Congo, Zambesi; Euphrates, Tigris, Amu (Oxus), Ganges, Hoang-ho, Yang-tse-kiang, Amur, Lena, Yenisei, Obi; St. Lawrence, Mississippi, Missouri, Mackenzie; Amazon, La Plata; Murray.

Drawing.—Freehand drawing of regular forms and curved figures from the flat; very elementary knowledge of degrees. (See Regulation 20.)

2. Class-subjects.

Grammar.—The distinguishing of the nouns, verbs, adjectives, articles, and pronouns in easy sentences. The more difficult pronouns (as the indefinite and distributive) are not to be used as tests of knowledge in this standard, but the children should be able to recognise as a pronoun any personal, possessive, or demonstrative pronoun, whether used as a substantive or as an adjective.

English History.—Such a knowledge of a few prominent persons and events distributed over the whole period from the Roman invasion, as might be imparted in twenty or thirty lessons of a simple character. Lessons explanatory of historical pictures would best answer the end in view. The teacher will prepare a list of about twenty-five persons and events and about a dozen dates, and the Inspector will ask simple questions to ascertain whether the children have retained an intelligent knowledge of the subjects set down in these lists, and will expect to find that the few dates selected are thoroughly impressed on their memory. The dates should be well spread over the whole period, and relate to very important events or crises.

Knowledge of Common Things.—A syllabus as for object-lessons in the former standards.

3. ADDITIONAL SUBJECTS.

The subject-matter of the reading lessons.

Repetition of Verses.—Syllabus showing progress.

Singing.—Easy exercises on the common chord and the interval of a second, in common time and in $\frac{2}{4}$ time, not involving the use of dotted notes; use of the signs *p.*, *f.*, *cres.*, *dim.*, *rall.*, and their equivalents; songs as before, or in common with the upper part of the school.

Needlework and Drill.—See Regulations 25 and 12.

STANDARD IV.

(The Standard of Education under Section 90 of "The Education Act, 1877.")

1. PASS-SUBJECTS.

Reading and Definition.—An easy book of prose and verse.

Spelling and Dictation suited to this stage, as represented by the reading-book in use; the dictation to exhibit a knowledge of the use of capitals and punctuation, but (at inspection) to be confined to prose.

Writing.—Good copies in a hand not larger than round-hand, and transcription of poetry.

Arithmetic.—Long multiplication of money; reduction of money, weights, and measures; the compound rules applied to problems in weights and measures; practice and the making out of bills of accounts and receipts; tables of money, weights, and measures; mental arithmetic to correspond. The weights and measures for this standard are: avoirdupois weight, troy weight, long measure, square measure, measures of capacity and time, and angular measure. The questions for "pass" must not include the difficult cases in which division by $5\frac{1}{2}$ or $30\frac{1}{4}$ with a remainder is involved, but such cases may be put separately as a test of the ability of the class.

Composition.—Letter-writing on prescribed subjects; the addressing of letters and envelopes.

Grammar.—The distinguishing of all the parts of speech in easy sentences; the inflections of the noun, adjective, and pronoun.

Drawing.—Practical plane geometry and very simple applications of scales to the geometrical problems. Freehand drawing to be kept up. (See Regulation 20.)

2. CLASS-SUBJECTS.

Geography.—New Zealand: Seat of Government; chief towns of provincial districts; leading products and industries according to locality; principal ports; interprovincial transit; principal objects of interest to tourists; rough maps of the colony showing such one set of principal features (as capes, towns, rivers, mountains) as the Inspector may require. Australia: The names and positions of the colonies and their chief towns, capes, bays, and ports. The map of the world: The principal trade routes; the countries in which the principal articles of commerce are produced; the chief ports and trading centres; the oceans and great seas; the most conspicuous geographical features of the several continents. The globe: The form of the earth; the daily rotation; the annual revolution; the approximately stable direction of the axis; day and night; the seasons; the zones; meridians and the cause of the differences of local time. Although permission is granted in Regulation 19 to vary the order of subjects in the course of instruction in geography, the preparation for Standard IV. must always include accurate and efficient instruction on the effects of the inclination of the earth's axis to the plane of its orbit.

English History.—The period from the Norman conquest to the Battle of Bosworth: About twenty-five persons and events, and about twelve dates are to be selected from this period by the teacher. (See Regulation 16, and the description of the work in history for Standard III.)

Elementary Science.—As prescribed in Regulation 21 or 22.

3. ADDITIONAL SUBJECTS.

Recitation.—A list of pieces learnt, and one piece (or more) specially prepared for the examination.

Singing.—Easy exercise on the chords of the dominant and sub-dominant, and in the intervals prescribed for Standard III.; exercises in triple time; use of dotted notes; melodies, rounds, and part songs in common with the higher standards. [*Note.*—It will suffice if this class take the air of the songs while the other parts are sung by the more advanced classes, and it may be useful to let older scholars lead the parts in a round.]

Needlework and Drill.—See Regulations 25 and 12.

STANDARD V.

1. Pass-subjects.

Reading and Definition.—A book of general information, not necessarily excluding matter such as that prescribed for Standard IV.

Spelling and Dictation suited to this stage.

Writing.—Small-hand copies in a strict formal style, and text hand; transcription of verse in complicated metres, and of prose exhibiting the niceties of punctuation.

Arithmetic.—Proportion; simple interest; the easier cases of vulgar fractions, and problems involving them; mental arithmetic.

Composition.—A short essay or letter on a familiar subject, or the rendering of the sense of a passage of easy verse into good prose.

Geography.—New Zealand and Australia, as for Standard IV. The map of Great Britain and Ireland: Capitals, great ports, and cities and towns of more than 200,000 inhabitants, with their characteristic industries and geographical advantages. The map of Europe: The principal seas, gulfs, headlands, mountains and rivers; countries and their capitals and great ports; geographical advantages of the several capitals and ports; forms of government of the Great Powers. Physical geography: General distribution of land and water on the surface of the globe; the mountain and river systems of some one continent; water-shed; formation of deltas. The globe: Significance of meridians and parallels of latitude; the seasons within the Arctic and Antarctic circles.

Drawing.—Drawing to scale; freehand drawing to be kept up. (See Regulation 20.)

2. Class-subjects.

Grammar.—Inflections of the verb; the parsing (with inflections) of all the words in any easy sentence; analysis of a simple sentence.

English History.—The period from the accession of Henry VII. to the death of Queen Anne: About twenty-five persons and events, and about twelve dates, are to be selected by the teacher. (See Regulation 16, and the description of the work in history for Standard III.)

Elementary Science.—See Regulations 21 and 22.

3. Additional Subjects.

Recitation.—Of a higher order than for Standard IV.

Singing.—More difficult exercises in time and tune; strict attention to expression marks.

Needlework and Drill.—See Regulations 25 and 12.

STANDARD VI.

1. Pass-subjects.

Reading.—A book containing extracts from general literature.

Spelling and Dictation suited to this stage.

Writing.—The copying of tabulated matter, showing bold head-lines and marking distinctions, such as in letter-press require varieties of type (*e.g.* the copying of these printed standards, or of a catalogue showing division into groups).

Arithmetic.—Vulgar and decimal fractions; interest and other commercial rules, such as discount, stocks, partnership, and exchange; the metric system of weights and measures, and calculations with pound, florin, cent., and mil; square root, and simple cases of mensuration of surfaces; mental arithmetic generally.

Composition.—Essay or letter.

Geography.—The maps of Asia and North America: Work analogous to the work prescribed under the head of "Map of Europe" for Standard V. The map of the world: British possessions; their principal towns and leading products; with some knowledge of their relative importance, and of the forms of government of the most important. Physical geography: The principal causes of difference of climate, with illustrations.

Drawing.—Elementary solid geometry, and freehand drawing from simple models. Freehand to be kept up. (See Regulation 20.)

2. Class-subjects

Grammar.—Complete parsing (including syntax) of simple and compound sentences (easy), prefixes and affixes, and a few of the more important Latin and Greek roots, illustrated by part of the reading-book; analysis of easy complex sentences.

English History.—The period from the death of Elizabeth to the reign of Victoria; also the elements of social economy—that is to say, very elementary knowledge of such subjects as government, law, citizenship, labour, capital, money, and banking. (See Regulation 16, and history for Standard III.)

Elementary Science.—See Regulations 21 and 22.

3. ADDITIONAL SUBJECTS.

Recitation.—As for Standard V.

Singing.—As for Standard V.

Needlework and Drill.—See Regulations 25 and 12.

19. In geography and history, in Standards IV., V., and VI., the course of instruction and the scope of examination need not conform strictly to the order in which the several parts of the subjects are set forth in the syllabus. The principal teacher may, at his discretion, make arrangements for instructing two or more of the classes S4, S5, and S6 together as one class in either of these subjects, and may take the several prescribed parts of a subject in any order, provided that the order he adopts for either subject be clearly defined in a written programme showing that the whole of the work prescribed for that subject in the syllabus is distributed in fair proportion over a three years' course of instruction, that this programme be always ready to be produced at the request of the Inspector, and that it be strictly followed. In this programme, or in a separate programme, or in a note-book of lessons actually given, or in a text-book marked for the purpose, the teacher may indicate for the guidance of the Inspector the particular parts of the subject which have been so treated as to afford reasonable expectation that the class will be able to give evidence of having retained a solid knowledge of them. It is expressly recognised that a great part of the instruction given in any subject is illustrative, or explanatory, or connective, and also that the aspects of a subject that have most interest for the teacher are those which he will probably be most successful in impressing on the imagination and on the memory of his pupils; and, further, that where it is not possible to do more than establish an outline or sketch of any department of knowledge there are usually more ways than one of drawing the outline. In history one teacher may be disposed to give prominence to dynastic considerations, another to military exploits, a third to social developments, and so on; and in geography the thread of the instruction may be mainly political, or mainly physical, or mainly commercial. The Inspectors will judge in every case whether the plan adopted is intelligent, the work done sufficient, and the instruction effective; and they will accommodate their examination to any intelligent and reasonable method by which the teacher seeks to comply with the requirements of the syllabus.

20. The drawing prescribed in the syllabus is illustrated by the several parts of Blair's Colonial Drawing-book, issued by the authority of the Minister of Education, and is further defined in this regulation (20). The work appointed to be done has a direct bearing on the industrial and decorative arts. In the first three standards the elementary knowledge of geometrical form is to be acquired; in the Fourth Standard elementary practical geometry is introduced, limited to plane geometry; in the Fifth Standard practice in scale drawing is required; and in the Sixth the practical geometry is extended so as to include elementary solid geometry. The instruments required in the work of the first three standards can be obtained in Wellington for 4d. They are—a measure of inches, a small set square of 45 degrees, and one of 60 degrees. For the Fourth Standard a pair of dividers (cost 6d.) is necessary. Freehand drawing begins in the First Standard; simple rectilineal figures, first drawn with the ruler, being afterwards copied without ruler, and also drawn as dictation exercises. The freehand for the Second Standard includes forms based on the circle, semi-circle, and quadrant; and in the Third Standard common curved forms of a less simple character are introduced. The Fourth Standard freehand work is to be decidedly in advance of Third Standard work. In the Fifth Standard the easier examples, and in the Sixth Standard all the examples, are to be drawn on a larger or smaller scale than that of the copy, and in the Sixth Standard freehand is extended so as to include drawing from simple models.

In the First Standard the pupils must be able to distinguish vertical, horizontal, and oblique lines, to recognise such lines when they see them, to give the lines the appropriate names, and to draw them with ruler and without ruler at dictation. They must know that when two lines cross one another four angles are presented to view, that the size of the angles is independent of the length of the lines, that one pair of angles may be larger than the other pair, that when there is no such inequality the angles are said to be right angles and the lines are mutually perpendicular, that in this case any two segments containing one of the right angles form also a "square" corner, that a horizontal line is perpendicular with respect to a vertical line, that the obtuse and the acute angles are respectively greater and less than the right angle, and that two lines without mutual inclination are parallel. Strict scientific definitions will not be demanded, but the pupils must be able to use

and apply the several geometrical terms required, and to give approximate verbal explanations of their meaning. They should also know how to draw lines parallel or perpendicular to one another by means of set-square and flat-ruler. Proceeding to simple geometrical figures, which should be illustrated by models in cardboard or wood as well as by drawing, they should know the square and the oblong as square-cornered figures of four sides, all the sides being equal in the square, while in the oblong there are two long sides equal and two short ones equal. The pupils should draw these figures with sides of prescribed length. The meaning of diagonal must be known, as also of triangle, equilateral, isosceles. The two triangles into which a diagonal divides a square or oblong must be recognised as right-angled triangles, and in the square as isosceles triangles. So far as is possible without strict geometrical construction the pupils must be able to draw at dictation, with ruler or as freehand exercises, the several kinds of triangles here named, as well as to recognise them. "Base," "apex," "altitude," as applied to isosceles triangles, should be known. The drawing exercises, with and without ruler, must include combinations of straight lines forming borders and simple patterns.

In the Second Standard the freehand drawing is to include forms based on the circle, semi-circle, and quadrant. The knowledge of terms—tested by models, by diagrams, and by dictation—must include circumference, radius, diameter, arc, chord, segment, semi-circle, and quadrant. The rhombus and the rhomboid are to be studied: the rhombus, as like the square, except as to its angles, and the rhomboid as similarly comparable to the oblong; the rhombus as divided by one diagonal into two obtuse-angled triangles, and by the other into two acute-angled triangles, all isosceles; and the rhomboid as divided by one diagonal into two obtuse-angled triangles, and by the other into two acute-angled triangles, two at least of the triangles being scalene.

In the Third Standard the new figures for study are the trapezium and the polygon, especially the regular hexagon and regular octagon. It is to be known that any regular polygon may be divided into isosceles triangles (equilateral in the hexagon), each of which has its apex in the centre of the figure. The right angle is to be known as an angle of 90 degrees; the sum of the angles round a point as equal to four right angles or 360 degrees; the sum of the angles of a triangle as 180 degrees (illustrated by folding a triangular piece of paper so that the three corners may meet at a point in one of the sides); and the sum of the angles of any four-sided figure as 360 degrees (illustrated by tearing off the four corners of a trapezium and putting them together at a point). The work of the standard must include ruling, freehand, dictation, and memory exercises on the geometry of form, and the freehand from set copies must include some curves more difficult than such as can be produced by joining quadrants together.

In the Fourth Standard the freehand drawing is to be more advanced than that of the Third Standard. The definitions are to be given in strict geometrical language, and are to include, in addition to all the terms used in the first three standards, the pentagon, heptagon, decagon, dodecagon, ellipse, major, and minor axes and foci. Practical use is to be made of set-squares in the drawing of lines at angles of 90, 60, 45, 30, 15 degrees, and others depending on these; and the pupils must be prepared with at least thirty problems of practical construction. They ought also to be able to work the problems from given dimensions to one or other of the following scales: 3in., 1½in., or ¾in. to a foot; ¾in. to a yard (¼in. to foot); 1in. to a mile (⅛in. to furlong). The problems required are the following:—

To bisect a given straight line or an arc.

To bisect a given angle.

To draw a perpendicular to a given straight line at a given point on it.

To draw a perpendicular to a given straight line from a given point outside it.

To draw a line parallel to a given straight line at a given distance from it.

To draw a line parallel to a given straight line through a given point.

To make an angle at a given point in a given line equal to a given angle.

To divide a given straight line into any number of equal parts.

To divide a given straight line proportionally to a given divided line.

To divide a circle into three, six, twelve, four, or eight equal parts.

To construct a triangle, its three sides being given.

To construct an equilateral triangle on a given side.

To construct an isosceles triangle, the base and the angle at the apex being given.

To construct a square, the side being given.

To construct a square, the diagonal being given.

To construct a rectangle, the sides being given.

To construct a rectangle, the diagonal and one side being given.
To construct a rhombus, the diagonal and side being given.
To construct a rhomboid, the sides and one of the angles being given.
To construct a trapezium equal to a given trapezium.
To construct a triangle on a given base and similar to a given triangle.
To construct a rectangle on a given side and similar to a given rectangle.
To enlarge or reduce any given figure by a system of squares.
To divide a circle into any number of equal parts (by construction).
To construct any regular polygon on a given line.
To construct an ellipse by pins and string.
To describe a circle through three given points.
To inscribe a circle within a given triangle.
To describe a circle with a given radius to touch two converging lines.
To describe a circle with a given radius to touch a given straight line and a given circle.

For the Fifth Standard pupils must be able to make their own freehand sketches of some common object as a preliminary to scale-drawing, to measure the object and note the measurements on the sketch, and then to draw the object to scale. Progress in freehand must be shown, and the simplest exercises of the year must be drawn either larger or smaller than the copy set.

In the Sixth Standard all copies made from the flat must be enlarged or reduced, and the freehand drawing must include drawing from simple models, the models being the same simple solids as are prescribed for the geometrical drawing of this standard, and combinations of the same as found in simple common objects, such as tables, boxes, books, bottles, buckets, &c. The model drawing and the method of teaching it are fully illustrated in the first-grade model drawing in the Colonial Drawing-book, issued by authority of the Minister of Education. The work in practical solid geometry is as follows: Plans and elevations of the sphere and cube, the cone and pyramid, the cylinder and prism, and slabs. Pupils must be able to give correct definitions of these solids, and to draw plans and elevations of them, and of simple objects based on them, on three planes of projection, and also to draw sections of them in any plane perpendicular to the horizontal or to the vertical plane.

21. The instruction in elementary science for Standards IV., V., and VI. shall be based on a programme, which shall be prepared by the head-teacher, to show the distribution of the subject over a three-years' course of lessons. The programme must include such elementary knowledge of physics, and such a conception of chemical action, as may be imparted by the proper use of Professor Bickerton's "Materials for Lessons in Elementary Science," and must also include intruction in elementary mechanics, or in such elementary physiology as may be learnt from Mrs. Buckton's "Health in the House," or in botany, or some other subject recognised by the Inspector as equivalent to one of these; provided, however, that, if the elements of agricultural knowledge be efficiently taught, no other elementary science shall be required for these standards.

22. The programme of the elements of agricultural knowledge which may be substituted for the programme of "elementary science" is as follows:—

Standard IV.—(*a.*) The parts of plants, stems, leaves, roots, flowers, and fruit (with special reference to fruit-trees and agricultural plants).

(*b.*) Fertilisation of flowers and formation of seed. Storage of food in seeds, roots, &c. Germination.

(*c.*) Composition of plants. The meaning of the terms organic and inorganic. Elements and compounds. Outlines of chemistry of air and water.

(*d.*) How plants obtain their food. Function of the leaf. Decomposition of carbonic acid. Leaf-green. Importance of water to the plant. Absorption of food by the roots. Action of root hairs.

(*e.*) The soil. How soils are formed. Decay of rocks. Chemical constituents of soil. Subsoil. Humus. The soil as a source of plant-food.

Standard V.—(*f.*) Brief outline of the chemistry of the elements essential to the growth of plants. Influence of light, warmth, and moisture on plant growth. Bacteria as the cause of decay and fermentation.

(*g.*) Mechanical analysis of soils. Classification of soils. Good and bad qualities of soils. Influence of mechanical condition of soils on their fertility. Plant-food in the soil, available and dormant.

(*h.*) The objects to be obtained by tillage. Improvement in the mechanical condition. Importance of a good seed-bed. Chemical changes induced by exposure to the air. Action of bacteria, &c., in the soil. Fallows. Tillage as partly replacing manure. Water in the soil. Capillary action in the soil. Drainage. Possible loss of plant-food in drainage water. Differences in modes of cultivation for light and heavy

soils. Plant-food in the soil. Exhaustion of the soil. Principal of application of manures. Principle of rotation of crops. Improvement of the soil.

Standard VI.—(*i.*) Object of manuring. General and special manures. Farmyard manure, its composition and value; its liability to ferment; management to prevent loss of value. Vegetable and animal refuse as manures. Green manuring. Plant-food most frequently wanting in soils. Manures supplying particular kinds of plant-food. Guanos. Special manures supplying nitrogen. Bone manures. Superphosphate and other mineral manures. Action of lime on the soil.

(*j.*) The characteristics of the commoner crops—cereals, fodder-crops, root-crops. Habit of growth of a plant. Distribution of roots. Principle of adaptation of manures to crops.

(*k.*) Importance of good seed. Propagation of plants by cuttings, tubers, bulbs, &c. Objects of grafting and pruning. Insect pests. Insect changes, as illustrated by the life-history of common insects. Nature of parasitic fungi.

In schools in which it is not practicable to have the work of the three standards done separately: Part I. may be taken as the work of one year; Part II. may be taken as the work of another year, together with so much of Part I. as is necessary to render Part II. intelligible to beginners; and Part III., with the most necessary portions of Part I., as the work of a third year.

23. The object-lessons and lessons on natural history, manufactures, and common things, for Standards I., II., and III., are intended as an introduction to the elementary-science lessons for the higher standards. Classes S1 and S2, or S1, S2, and S3, may be taught and examined together in these subjects if the programme of lessons is varied from year to year, so that on the whole the work prescribed for two or three classes shall be done in two or three years, as the case may be; or S3 may be instructed in elementary science with any higher class, and even S1 and S2 may, instead of receiving lessons on objects, &c., be instructed in the elementary science prescribed for the higher standards if the instruction in elementary science is oral, illustrative, and experimental, and is, in the teacher's judgment, adapted to the capacity of the lower classes and fitted to promote the development of their faculties.

24. Any order of instruction in singing other than that prescribed in the standards will be recognised as of equivalent value if the result be good singing, sufficient theoretical knowledge, and careful training of the lower classes as well as the higher.

25. All the girls in any public school in which there is a mistress or assistant mistress shall learn needlework, and the Inspector shall judge all other work done by the girls more leniently than that done by the boys in such a degree as would be implied in reducing by 10 per cent. the minimum marks required for any examination pass. To secure full approval the needlework of the several classes must be according to the following programme:—

S1. Threading needles and hemming. (Illustration of work: Strips of calico or a plain pocket-handkerchief.)

S2. The foregoing, and felling, and fixing a hem. (Illustration: A child's pinafore.)

S3. The foregoing and stitching, sewing on strings, and fixing all work up to this stage. (A pillow-case, or woman's plain shift, without bands or gathers.)

S4. The foregoing and button-holing, sewing on buttons, stroking, setting in gathers, plain darning and fixing. (A plain day- or night-shirt.)

S5. The foregoing, and whipping, a tuck run, sewing on frill, and gathering. (A night-dress with frills.)

S6. Cutting out any plain garment and fixing it for a junior class; darning stockings (fine and coarse) in worsted or cotton; grafting; darning fine linen or calico; patching the same; darning and patching fine diaper.

If knitting is learnt it shall be in the following order: A strip of plain knitting; knitted muffatees, ribbed; a plain-knitted child's sock; a long-ribbed stocking.

26. In case of any misunderstanding arising as to the meaning of any part of these regulations the Minister of Education may declare what is to be taken as the meaning, and his interpretation shall be binding upon all persons to whom it is communicated, and shall, if declared by publication in the *New Zealand Gazette*, have equal force with these regulations.

27. Standard IV. as defined in these regulations shall be the standard of education prescribed under "The Education, Act, 1877," section 90, subsection (4).

ROBERT LECKIE,
Acting Clerk of the Executive Council.

By Authority GEORGE DIDSBURY, Government Printer, Wellington.