Official Regulations.

REGULATIONS RESPECTING TEACHERS' CERTIFICATES FOR 1885.

(Continued from last issue.)

IV. FIRST CLASS CERTIFICATES.

17. IN order to be qualified to receive a First-Class Certificate, the candidate must have obtained a Second Class Certificate, and must have passed such professional and non-professional examination for First-class Certificates as may be prescribed.

18. Graduates in Arts, who have proceeded regularly to their degrees in any university in the British Dominions, and who produce satisfactory evidence of having taught successfully for one year, and satisfactory proof of good character, may be admitted to the examination for First Class Certificates without previously obtaining Third and Second Class Certificates.

19. The non-professional examination for Grade C must be taken before the Candidate is eligible to write for a higher grade, provided always that the examinaton for the higher grade may be taken in the same year, and before the results of the examination for Grade C are ascertained.

20. After having taken a First Class Grade C the Candidate is then eligible for Grade B or A, in which the following option is allowed :—(a) English and Literature with History and Geography, or (b) Mathematics.

21. The Department will accept the following examinations according to the curriculum of the Honour courses prescribed by the University of Toronto, or the curriculum of equal standard in any college possessing University powers in the Province of Ontario; or in the University of McGill College at Montreal, as equivalents for the non-professional examination as hereinafter mentioned, namely :

(a) For Grade B, first-class honours taken in the first year in any one of the departments of Mathematics, Classics or Modern Languages; or First Class Honours taken in the second year either in the department of Natural Science, or that of Mental and Moral Science and Civil Polity.

(b) For Grade A, First Class Honours taken in the second year either in the department of Classics or that of Modern Languages, or First Class Honours taken in the third year either in the department of Natural Science or that of Mental and Moral Science and Civil Polity; provided the Candidate also passed the full examination prescribed in the year in which honours are accepted as above.

22. The Professional Examination for all Grades of First Class Certificates will be the same. Papers will be required on the following subjects :—

1. Education, viz.: (a) *Education Methods* (the candidate may consult the following works:—*Teacher's Manual of Method and Organization*, by Robert Robinson, Inspector of National Schools, Ireland ; *Methods of Instruction*, by J. P. Wickersham, A.M., Principal of the Pennsylvania State Normal School; Jewell on *School Government* ; *Lectures on Teaching*, by J. G. Fitch, M.A.); (b) *History of Education* (the following works may be consulted : *Essays on Educational Reformers*, by Robert Henry Quick, M.A.,—*Practical Educationists and their Systems of Teaching*, by James Leitch, Principal of the Church of Scotland Normal School, Glasgow); (c) *Psychological Foundations of Education* (*Education as a Science*, by Alexander Bain, LL. D.; Sully's *Psychology*).

2. Reading and Elocution :

3. Music and Drawing ;

4. Drill and Calisthenics.

23. Candidates for First Class Certificates at the Non-Professional Examination must make fifty per

cent for Grade C, sixty per cent for Grade B, and seventy per cent for Grade A, of the aggregate marks attainable on all subjects.

24. The non-professional examination for grade C will be limited as follows :—

English Language and Literature.

Grammar.—A thorough acquaintance with the subject will be required.

Composition.—Candidates will be required to show, by passing an examination on this subject, and by the character of their answers in other subjects, that they are in the habit of writing the English language correctly.

Literature.—Candidates will be required to have a general acquaintance with English Literature and its history, and a fuller knowledge of special eras and authors to be prescribed from time to time by the Department

History and Geography.

History.—A special knowledge of the History of England between 1688 and 1820, as presented in Green's *Short History of the English People.*

Geography.—Political Geography of North America, Europe, and the British Empire, with Physical Geography as treated in Geikie's *Primer of Physical Geography*, and Mathematical and Physical Geography as treated in Sullivan's *Geography Generalized.*

Mathematics.

Algebra.—Fundamental Operations ; Involution and Evolution ; Resolution into Factors ; Principle of Symmetry ; Theory of Divisors . Fractions; Ratio ; Proportion and Variation ; Theory of Indices ; Surds; Arithmetical, Geometrical, and Harmonical progression ; Scales of Notation ; Permutations and Combinations; Introduction to Binomial Theorem as far as positive and negative integral exponents ; Simple and Quadratic Equations, with relations between Roots and Coefficients ; Problems.

Arithmetic and Mensuration.—The candidate will be required to know the subject in theory and practice ; to be able to solve problems with accuracy, neatness and despatch ; to be familiar with rules for mensuration of Surfaces and Solids.

Geometry.—Euclid, Books I. to IV. (inclusive), Book VI., and definitions of Book V. Exercises.

Elementary Mechanics.

Statics.—Equilibrium of Forces acting in one plane ; Parallelogram of Forces, Parallel Forces, Moments, Couples, Centre of Gravity, Virtual Work, Machines. Friction, Experimental Verifications.

Dynamics.—Measurement of Velocities and of Accelerations; Laws of Motion, Energy, Momentum, Uniform and Uniformly Accelerated Motion, Falling Bodies, Experimental Verifications.

Hydrostatics.—Pressure of Fluids, Specific Gravities, Floating Bodies, Density of Gases as depending on Pressure and Temperature, Construction and use of the more simple Instruments and Machines.

Physical Science.

Chemistry.—The examination in this subject will be based on Reynold's *Experimental Chemistry, Parts I. and II.*, and Tilden's *Chemical Philosophy.*

Heat.—Stewart's *Elementary Treatise on Heat*, 3rd edition.

25. The limitation of grades A and B will be as follows :—

DEPARTMENT OF ENGLISH.

Composition.—History and Etymology of the English Language ; Rhetorical Forms ; Prosody. Books of Reference : Earle's *Philology of the English Tongue* ; Abbot and Seeley's *English for English People* ; Bain's *Composition and Rhetoric*, or Hill's *Rhetoric* ; Marsh's *English Language and Literature*, Lectures VI. to XI. inclusive.

Literature :

1. History of English Literature, from Chaucer to the end of the reign of James I. Books of Reference : Craik's *History of the English Literature and Language*, or Arnold's *Literature*, English Edition ; Marsh's *English Language and Literature*. Lectures VI. to XI. inclusive.

2. Specified works of standard authors as prescribed from time to time by the Department.

History :

Greece —The Persian to the Peloponnesian War inclusive.—Cox's *History of Greece* (unabridged).

Rome.—From the beginning of the Second Punic War to the death of Julius Cæsar.—Mommsen's *History of Rome.*

England. —The Tudor and Stuart Periods, as presented in Green's *Short History of the English People*, Macaulay's *History of England* (or Frank Bright's *History of England*, Second Volume), and Hallam's *Constitutional History.*

Canada.—Parkman's *Old Régime in Canada.*

Geography.—So much Ancient Geography as is necessary for the proper understanding of the portions of the Histories of Greece and Rome prescribed.

DEPARTMENT OF MATHEMATICS.

Algebra.—Symmetry, Binomial Theorem, Multinomial Theorem, Exponential and Logarithmic Series, Interest and Annuities. Indeterminate Coefficients, Partial Fractions, Series (Convergency and Divergency, Reversion, Summation), Inequalities, Determinants as far as in *Gross*, Reduction and Resolution of Equations of first four Degrees and of Binomial Equations, Relations between Roots and Coefficients of Equations, Indeterminate Equations, Problems.

Analytical Plane Geometry.—The Point (including Transformation of Co-ordinates), the Right Line, the Circle, the Parabola, the Ellipse, the Hyperbola, the General Equation of the Second Degree, Abridged Notation.

Trigonometry —Trigonometrical Ratios, General Values of Angles, Functions of Sum and Difference of Angles, Multiples and Sub-Multiples of Angles, Trigonometrical Equations, Solutions of Triangles, Measurement of Heights and Distances, Inscribed, Circumscribed, and Escribed Circles of a Triangle ; Quadrilaterals, Description of Vernier and Theodolite, Trigonometrical and Logarithmic Tables, Demoivre's Theorem.

Dynamics.—Moments of Inertia, Uniform Circular Motion, Projectiles in Vacuo, Collisions, Simple Pendulum, Experimental Verifications.

Elementary Geometrical Optics.—Reflection and Refraction of Light at Plane and Spherical Surfaces, including Prisms and Lenses (aberration not considered); the Eye ; Construction and use of the more simple Instruments.

The following books are recommended for reference in addition to those prescribed for Grade C :—

Algebra.—Gross.

Analytical Geometry.—Refer to Salmon, Vyvyan and C. Smith.

Trigonometry.—Hamblin Smith ; Refer to Colenso or Todhunter.

Dynamics.—Garnet, or Gross's *Kinematics and Kinetics.*

Geometrical Optics.—Aldis.

(To be continued.)

BOOKS RECEIVED.

Hall, Horatio, M.A. *The Iroquois Sacrifice of the White Dog;* reprinted from the American Antiquarian for January, 1885. From the author.

Hall, Horatio, M.A. *The Life and Work of Chief George II. M. Johnson Onwanonsyshon among the Six Nations;* reprinted from the Magazine of American History for February, 1885. From the author.