APPENDIX F.

ROYAL MILITARY COLLEGE OF CANADA.

SYLLABUS OF MATHEMATICS—GENERAL SUMMARY OF SUBJECTS AND TEXT BOOKS.

Euclid (Todhunter.)
Arithmetic (printed notes by Major Kensington, R.A.)—Together with Smith and McMurchy or any other approved text-book. Scales of notation and mercantile arithmetic are omitted.
Algebra (printed notes by Major Kensington, R.A.)—Todhunter's Elementary and Todhunter; the latter only for the more advanced students.
Logarithms (Chambers' or other tables)—Thorough practical use of Logarithms.
Plane Trigonometry (Todhunter.)
Spherical Trigonometry (Todhunter.)
Conic Sections (Todhunter.)—This subject is taught almost entirely by lecture, geometrical proofs being given whenever practical and easy.
Differential Calculus (Williamson.)
Integral Calculus (Williamson.)
Statics and Dynamics (Todhunter's Mechanics for beginners)—The most advanced students are instructed further by lectures grounded on Todhunter's Analytical Statics, Tait's Dynamics, and other standard works, free use being made of the calculus.
Statical Problems solved by Construction (Tracts on Mechanics by Crofton and Kensington) Work and Energy (Tracts on Mechanics)—Special reference to artillery problems.
Rotation considered geometrically without text books up to the resultant motion of an elongated projectile.
Hydrostatics (Besants' Elementary)—Special machines used in the Royal Artillery. Higher course of lectures with the use of the calculus.
Mensuration—Without text book.
Applied Mechanics (Croftons' Elementary)—Higher course of lectures grounded on Rankine, Rouleaux, Collignon, and other works.
Mechanism (Goodeve)—Steam Engine; general principles only taught by lecture.
　　　The whole of the above course is taught by lectures and personal instruction, aided by text books as far as possible. Shorter and easier proofs than those in the text books are given whenever practicable. Notes of the lectures are taken by the cadets and revised by the instructors.
　　　The following shows the syllabus for each class in detail:
　　1st. Obligatory.
　　2nd. Voluntary.
　　　The Voluntary Course for the 1st Class is more extensive than can possibly be taken, except by cadets of unusual mathematical talent, who might desire to continue the study of mathematics in lieu of other subjects. The marks allotted for this class are not intended to represent the adequate value of the course.