CHEMISTRY.

Chemistry of the metals.
Thermo-chemistry,
Combustion.
Fuels.
Chemical manufacture.
Laboratory practice.

ENGINEERING AND SURVEYING.

Statics and dynamics (pure and applied.)
Strength and elasticity of materials.
Experimental work in engineering laboratory.
Transit-theodolite surveying.
Levelling.
Railway location curves, etc.
Hydrographic surveying.

MINERALOGY AND GEOLOGY.

Elements of these sciences.
Blowpipe practice.
Determination of minerals.

METALLURGY.

Iron and steel.

PHYSICS.

Hydrostatics.
Optics.

EXPERIMENTAL PHYSICS.

Introductory course.

VACATION WORK.

See pages 43 and 101.

**III. Year.**

DRAWING.

Subjects of previous years continued.
Descriptive geometry—shades and shadows, stone cutting. perspective projection.
Original designs—bridges, roofs, floors, arches, etc.