

2. ASSAYING, MINING AND METALLURGY.

Professor.—B. J. HARRINGTON, B.A., Ph. D.

I. *Use of the Blowpipe and Assaying.*—(Middle Year.)

Use of the Blowpipe.—The object of this course is to enable Students, by means of the blowpipe and a few simple reagents, to detect the nature of various minerals or ores. On account of the small amount of apparatus required, and the rapidity with which accurate results may be arrived at, a knowledge of this subject will be found most useful to those engaged in geological or other field-work.

Assaying.—The course in Assaying includes lectures and practical work. Assays are made, by various methods, of gold, silver, copper, lead, iron and other ores. Examinations are also made of coal, peat, clay, &c.

II. *Mining and Metallurgy.*—(Senior Year.)

Mining.—Among the more important subjects taken up in this Course, the following may be mentioned:—Blasting and the nature and use of different Explosives; Quarrying; Hydraulic Mining and Sluicing; Boring and Boring Machinery; Sinking, Timbering and Tubbing of Shafts; Driving and Timbering of Levels; Underground Conveyance and Hoisting; Drainage and Pumping; Lighting and Ventilation of Mines; Special Methods of Exploitation employed in the working of metalliferous deposits or of Coal-seams; Dressing of Ores by means of hammers, stamps, rollers; riddles, buddles, &c.

Metallurgy.—A short Course of lectures, illustrated by a series of Ores and Metallurgical Products. The general properties of the metals and the nature of fuels, fire-clays, &c., are first discussed; and afterwards, the more important metals and the methods of obtaining them from their ores; by wet or dry processes, taken up in detail.

3. PRACTICAL CHEMISTRY.

Professor.—GILBERT P. GIRDWOOD, M. D.

This Course will be conducted in the large and commodious Laboratory recently constructed for the Medical Faculty. It will include a general Course of Qualitative and Quantitative Analysis, adapted to the previous training of the Student; leading in the latter part of the Course to special studies adapted to his future pursuits.

§ X.

First

Second

Third

2.

Railway

Hydraulic

Girders

Strength

Specific

Survey