

I.—ELEMENTARY COURSE OF MINERALOGY AND GEOLOGY
INCLUDING THE LEADING PRINCIPLES OF PHYSICAL,
GEOGRAPHY.

This course, comprising about forty Lectures, is discussed in the following order :

1. *The Elementary Principles of Mineralogy* ; comprising, more especially, the practical discrimination of Minerals.

(*Book of reference*—Dana's Manual of Mineralogy.)

2. *The Elements of Geology and Palæontology.*

(*Book of Reference*—Lyell's Elementary Manual.)

3. *The Elements of Physical Geography.*

(*Book of Reference*—Johnston's Elementary Atlas of Physical Phenomena, 8vo edition.)

II.—ADVANCED COURSE ON MINERALOGY.

In this course the following subdivisions are adopted :

1. *The Physical and Chemical Relations of Machinery.*—This division includes the subject of Crystallography, the Classification of Minerals, and other questions constituting the general philosophy of the science. A certain knowledge of the common principles of Chemistry, and of Plane and Spherical Trigonometry, is here desirable on the part of the Student.

2. *Descriptive and Applied Mineralogy.*—Examinations of all the more important and interesting mineral substances that occur in nature, with the industrial application of these considered in detail.

(*Book of Reference*—Dana's System of Mineralogy, 4th edition.)

III.—ADVANCED COURSE ON GEOLOGY AND PHYSICAL
GEOGRAPHY.

This course is discussed under the following subdivisions :

1. *Fundamental principles of Geology.*—A review of the common facts of the science, and of Geological phenomena in general.

2. *Palæontology.*—The study of organic remains: a subject not only of high scientific interest, but also of the greatest practical importance in determining the relative ages and positions of rock groups.