

3. *Chronological and Descriptive Geology.*—The application of the preceding branches of enquiry to the interpretation of the physical History of the Earth. The Geology of Canada is fully entered into in this part of the course.

4. *Physical Geography.*—The earth in its present aspect and conditions.

5. *Economic and Applied Geology.*—A sketch of the more important Geological applications with notices of rock materials used in agriculture and the arts.

(*Books of reference*—Lyell's Elements and Principles of Geology; De la Beche's Geological Manual; Pictet's Paléontologie; Geology of Canada, by Logan and Hunt; Johnston's Quarto Atlas of Physical Geography; Synopsis of Professor Chapman's Lectures; Professor Chapman's Examples of the Application of Trigonometry to the Calculation of Crystal Axes.)

§ 12.

AGRICULTURE.

Professor—GEORGE BUCKLAND, Esq.

Subjects of Lectures :

I.—HISTORY OF THE ART.

- (a) Agriculture, as understood and practised by the Ancients.
- (b) Agriculture during the Middle Ages.
- (c) Modern Agriculture.

II.—THE SCIENCE OF AGRICULTURE.

- (a) Soils: their origin, composition, distribution, classification, &c. Relations of Geology, Chemical and Mechanical Analyses.
- (b) Plants: their structure, composition, growth, &c. Manures: theory, action and relative value of; modes of preparing, applying, and economizing. Relations of Chemistry and Botany to Agriculture.
- (c) The domesticated animals of the farm: history and description of varieties or breeds; the principles of breeding, with biographical sketches of the more distinguished breeders; diseases and treatment; relations of animal physiology to breeding, feeding, &c.
- (d) Influence of climate on agricultural productions, both animal and vegetable. Value of a knowledge of Meteorology and Physical Geography to farmers.