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.

III.—THE PRACTICE OF AGRICULTURE.

- (a) Methods of acquiring a practical knowledge of farming. Importance of an agricultural literature. Connection of theory, and practice. Popular fallacies.
- (b) Principles of cultivation: instruments of tillage, illustrated and described.
- (c) Draining: its value and various modes of execution explained. Subsoil ploughing. Fallowing. Rotation of crops, &c.