FIRST PRINCIPLES OF AGRICULTURE.

CHAPTER I.

THE SOIL.

- r. The cultivation of the soil is commonly known as Agriculture, and the term usually includes the several operations and the general system of management whereby the farmer is enabled to grow corn, meat, wool, and various other marketable products. The success of his work is determined by his producing as large a supply as possible from the land, at the smallest cost to himself, and with the least injury to the soil. The object of the present work is to explain in familiar language some of the circumstances which influence these results.
- 2. The surface of the land consists of earthy matter, more or less finely broken, and this is called **the soil**. This may be termed the raw material which the farmer has to manufacture into products suitable for food and clothing. He uses the soil for these purposes, calling to his aid the agencies of animal and vegetable life, and the stores of fertility which are present in the atmosphere.

3. In some cases the soil is very shallow, and if you dig a hole in the ground you will soon reach the hard rock. In other instances there is a very considerable depth of earth, and thus we have both shallow and deep soils.

4. When a hole is dug into a deep soil—especially if it be what is known as a clay soil—we observe a marked change in the general appearance of the soil

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