

such manner, and in such proportions, as are in various degrees favourable to the growth of the different vegetable productions, which man requires for himself and the domestic animals he has collected around him.

The process is obvious whereby even solid rocks are converted into soil fit for the maintenance of vegetation, by simple exposure to atmospheric agency; the disintegration produced by the vicissitudes of heat and cold, moisture and dryness, reduces the surface of almost all strata to a comminuted state of soil, or mould, the fertility of which is usually in proportion to the compound nature of its ingredients.

The three principal materials of all strata are the earths of flint, clay, and lime; each of these, taken singly and in a state of purity, is comparatively barren: the admixture of a small proportion of clay gives tenacity and fertility to sand, and the further addition of calcareous earth produces a soil highly valuable to the agriculturist: and where the natural proportions are not adjusted in the most beneficial manner, the facilities afforded by the frequent juxtaposition of lime, or marl, or gypsum, for the artificial improvement of those soils which are defective in these ingredients, add materially to the earth's capability of adaptation to the important office of producing food. Hence it happens