

powers in various ways. The atmosphere is perpetually modifying it; rivers, waves, and winds, act here and there upon its surface, and alter its external form; water introduces into it the substances which it holds in solution. The different constituent parts of soil act upon each other chemically, and in this manner new decompositions and mixtures are produced; and this chemical change is increased by the action of vegetables, as well as of bodies deriving their origin from both organic kingdoms.

From what has been said of the relations existing between the masses of which the solid crust of the globe is composed, and the loose earth or soil by which it is covered, it appears evident enough (Hausmann concludes) that they have great influence over its formation and nature, and therefore upon the more perfect vegetables, and especially those which are the objects of cultivation; and that although the fertility of the soil is much increased by these vegetables themselves, yet the first foundation of their vigour is derived from the disintegration and decomposition of rocks. If this be correct, the constitution of the solid crust of the earth has a much more extended influence. For, by preparing a habitation for the greater and most important parts of plants, it also exerts a high degree of influence upon the animals which derive their sustenance from them, and, at the same time, affords the means of subsistence to man*.

* Those who feel disposed to examine the connection of Geology and Agriculture, will find many additional details and views given in Hausmann's work, of which the above may be considered in some degree as a condensed view.