

and his selection of the kind of vegetation with which it shall be habitually clothed, place to a great extent within his power. It is chiefly in his clearance or allowance of arborescent vegetation, and in his artificial drainage of the soil over extensive districts for agricultural purposes, that his influence on these relations is perceptible. The total rainfall, and (which is perhaps as regards weather and climate of even more importance) the *frequency* of showers on an extensive well-wooded tract, or one entirely covered by forests, ought, on every theoretical view of the causes which determine rain, to be greater than on the same tract denuded of trees. The foliage of trees defends the soil beneath and around them from the sun's direct rays, and disperses their heat in the air, to be carried away by winds, and thus prevents the ground from becoming heated in the summer; while, on the other hand, a heated surface-soil reacts by its radiation on the clouds as they pass over it, and thus prevents many a refreshing shower, which they would otherwise deposit, or disperses them altogether. So again of drainage:—by carrying away rapidly the surface-water down to the rivulet, and so hurrying it away to the ocean, it not only cuts off a great deal of the supply of local evaporation, which is a material element in the amount of rainfall, but by causing the surface to dry more rapidly under the sun's influence, it allows it also to become more heated; and so to conspire with the action of the denudation of trees to prevent rain. Evidence is not wanting to corroborate this *à priori* view of the matter. The rainfall over large regions