

ford a more easy passage to roots, than granular crystalline ones; pure quartz resists the roots of plants in the highest degree; sandstone much less; and pure limestone, on account of its comparatively small number of fissures, is much less favourable to vegetation than marl, chalk, or slightly cohering calcareous rocks, the masses of which are usually split in all directions.

The direction and inclination of the strata have also some influence in this matter; for, in proportion as the principal fissures of the strata are, from their direction or inclination, more readily presented to the roots of vegetables, the less prejudicial will their surface be to vegetation. Horizontal strata, therefore, are the least favourable to vegetation, perpendicular ones the most. In the inclination of strata intermediate in some degree between these positions, the roots of vegetables will find a greater obstacle on the side of a hill in which the surface of a stratum is opposed to them, than on the other, in which the principal fissures of the strata are open. The effects of this circumstance may frequently be observed in mountainous tracts having two principal inclinations, the state of vegetation, and especially the growth of wood, being more prosperous on the one of these declivities than on the other.

The surface of the solid strata of the earth may also have an *indirect influence* upon the cultivation of vegetables. The various *inclinations of this surface* deserve first to be considered, being of the greatest effect with regard to fixing the fertile soil. The horizontal position of a rocky surface is in the highest degree favourable to the stability of vegetable earth; and the greater its angle of inclination, the greater is the danger of its losing