

in so many places, is to be ascribed to the operation of running water which dissolves and transports earthy substances to lower levels, and also to the action of fire in dissipating solid bodies, and ejecting them above ground. Thus precipices and channels are produced on the surface of the earth, and caverns and tunnels underneath. The strata are sometimes disrupted by the sudden rise of subterranean exhalations ; at other times they are broken up by the falling in of the roofs of cavernous spaces inside the earth. Hence they are thrown into a great variety of different positions, being sometimes vertical, more often inclined at various angles, occasionally even bent into arches.

This alteration in the original position of strata is the real cause of the inequalities of the earth's surface, such as mountains and plains. Some mountains have also been produced by the outburst of fires from inside the earth, whereby ashes and stones, together with sulphur and bituminous substances, have been cast forth. It is easy to perceive that all our mountains have not been in existence since the beginning of things.

Steno then proceeds to show that by the disruption of the strata, outlets have been provided for the escape of materials from inside the earth. Chief among these are the springs of water that issue from the hills. The cracks, fissures and cavities of the strata have served as receptacles for most minerals, whether introduced by vapours or otherwise. The question of the origin of rock-crystal gives the author occasion to discourse on the crystallography of this mineral,