and he ascribed the domal form of the trachyte mountains not to the swelling up of homogeneous masses, but to successive outbreaks of viscid lava streams. Neither did he draw any fundamental distinction between volcanic eruptions on land and those on the ocean-floor. Cones of erupted material form in the case of submarine as well as continental volcanoes, but owing to the distribution of the material by water, the layers of volcanic rock are less highly inclined and generally of tufaceous character. Some submarine volcanoes have their cones of ejection built up by repeated additions until they rise above the surface; others (*e.g.*, Île de France, Teneriffe, Palma, the Coral Islands in the Pacific Ocean) may, in Scrope's opinion, have been arched to their present position by the subterranean forces of heat. The difference between the "craters of elevation" of Von Buch and the uplifted islands of Scrope is that the former are supposed to have received their characteristic form and their crater, independently of any accompanying phenomena of eruption, merely by the upward swelling and fracture of the crust, whereas Scrope thinks the elevated submarine islands of volcanic rock are in all cases originally cones of erupted rock-material accumulated superficially round an orifice, and afterwards upraised as a whole.

Von Buch's "Serial Volcanoes" are explained similarly by Scrope as volcanic cones which participated in a crust-uplift. All volcanoes, according to him, occur upon crust-fissures; some eruptive vents are permanently closed, and others continue to remain in communication with the earth's interior, and are the scene of periodic eruptions. These open vents, by affording a ready passage for subterranean lava, vapours, and gases, serve to protect the neighbourhood from earthquakes. Scrope attached little tectonic importance to the elevations at volcanic fissures, regarding them as quite local in effect, and having no immediate connection with the regional crust-movements which elevate continents and mountain-systems.

The above are the leading doctrines of volcanicity taught by Scrope, and they may be said to have laid the first secure foundation of present conceptions of eruptive phenomena. The chief merit of Scrope's work consists in the convincing demonstration it gives of the origin and composition of volcanoes, in the disproof of the Elevation-Crater theory, and in the description of a superheated subterranean magma saturated