

claim a son gifted with the skill, patience, imagination, and originality that qualified him so admirably for the laborious task which he undertook. His achievements form one of the most notable landmarks in the early history of geology.

Desmarest, wandering over the volcanic districts of Central France, had been profoundly impressed, as every traveller must be, by the extraordinary varieties in the condition of the various lava-currents. Some of these sheets of rock retain still the dark, verdureless, rugged surfaces which they assumed ages ago when their molten floods stiffened into stone. Others have lost their covering of scoriæ, and are seen clinging to the sides of valleys, in positions which seem impossible for any lava-current to have taken. Others are perched in solitary outlying sheets on the tops of plateaux, with no cone near them, nor any obvious source from which they could have flowed.

Pondering on these apparently contradictory phenomena, Desmarest, with the inspiration of true genius, seized on the fruitful principle that would alone explain them. He saw that the varying conditions of the several lavas were due to the ceaseless influence of atmospheric denudation. He convinced himself that the detached outliers of basalt, capping the ridges and plateaux are really remnants of once continuous sheets of lava, and that their isolation, together with the removal of their original covering of scoriæ and slags, is to be ascribed to the operations of rain and melted snow. The depth of the valleys cut through these lava-platforms was found by him to be commensurate with the antiquity of the lavas, and with