

46. EROSION OF VALLEYS BY WATER-CURRENTS.—There is perhaps no district which exhibits in more striking characters the erosive power of running water, than Auvergne. In many places the basalt is columnar, like that of Staffa, and the Giants' Causeway; and one range, on the banks of the Ardèche, forms a majestic colonnade 150 feet in height, extending a mile and a half along the valley which has been channelled out by the stream that flows at its base. Mr. Scrope's description of this process is highly graphic. "The bed of the Ardèche is strewn with basaltic boulders, pebbles, and sand, originating from the destruction of the columnar ranges. In some of the volcanic cones the beds of basalt may be traced issuing from the crater and following the inequalities of the valley, just as a stream of lava would flow down the same course at the present time. Yet these ancient currents have since been corroded by rivers which have worn through a mass of rock 150 feet in height, and formed a channel even in the granite rocks beneath, since the lava first flowed into the valley. In another spot, a bed of basalt 160 feet high, has been cut through by a mountain stream, and very beautiful columnar masses are displayed. The vast excavations effected by the erosive power of water along the valleys which feed the Ardèche, since

Lyell, Murchison, Dr. Daubeny, Dr. Hibbert, MM. Croiset, Jobert, Robert, and Bertrand-Roux. Mr. Scrope's work cannot be perused, even by the general reader, without deep interest.