forms a dark ferruginous layer, known to Scottish farmers as "moorband pan." So effectually does this layer interrupt the drainage that the soil remains permanently damp and infertile. But when the "pan" is broken up and spread over the surface it quickly disintegrates, and improves the soil, which can then be properly drained (postea, p. 811).

Siliceous springs form important masses of sinter round the point of outflow. The basins and funnels of geysers have already been described (p. 402). One of the sinter-beds in the Iceland geyser region is said to be two leagues long, a quarter of a league wide, and a hundred feet thick. Enormous beds of similar material have been formed in the Yellowstone geyser region. Such accumulations usually point to proximity to former volcanic centres, and are formed during one of the latest phases of volcanic action.

(3) *Formation of subterranean channels and caverns.*—Measurement of the yearly amount of mineral matter brought up to the surface by a spring, furnishes an approximate idea of the extent to which underground rocks undergo continual loss of substance. The warm springs of Bath, for example, with a mean temperature of 120° Fahr., are impregnated with sulphates of lime and soda, and chlorides of sodium and magnesium. Sir A. C. Ramsay estimated their annual discharge of mineral matter to be equal to a square column 9 feet in diameter and 140 feet in height. Again, the St. Lawrence spring at Louèche (Leuk) discharges every year 1620 cubic metres (2127 cubic yards) of dissolved sulphate of lime, equivalent to the lowering of a bed of gypsum one square kilometre (0·3861 square mile) in extent, more than 16 decimetres (upward of five feet) in a century.[97]

[97] E. Reclus, "La Terre," i. p. 340.