overflows incessantly in the form of Springs, that carry with them fertility into the adjacent valleys. (See Pl. 67, fig. 1, S.)

The discharges of water from these reservoirs are much facilitated, and increased in number, by the occurrence of *Faults* or *Fractures* that intersect the strata.*

There are two systems of Springs which have their origin in Faults, the one supplied by water *descending* from the higher regions of strata adjacent to a fault, by which it is simply intercepted in its descent, and diverted to the surface in the form of perennial springs; (see Pl. 67, fig. 1, H.) the other maintained by water *ascending* from below by Hydrostatic pressure, (as in Artesian Wells,) and derived from strata, which at their contact with the fault, are often at a great depth;

* Mr. Townsend, in his Chapter on Springs, states, that there are six distinct systems of springs in the neighbourhood of Bath, which issue from as many regular strata of subterraneous water, formed by filtration through either sand or porous rocks, and placed each upon its subjacent bed of clay. From these, one system of springs is produced by overflowing in the direction towards which the strata are inclined, or have their *dip*; whilst another system results from the dislocation of the strata, and breaks out latterly through the fractures by which they are intersected.

It is stated by Mr. Hopkins, (Phil. Mag. Aug. 1834, p. 131), that all the great springs in the Lime-stone District of Derbyshire are found in conjunction with great Faults, "I do not recollect (says he) a single exception to this rule, for I believe in every instance where I observed a powerful spring, I had independent evidence of the existence of a great fault."