

if they had been injected, either at the time of, or after the elevation of all the strata, and had produced but little disturbance in the rocks through which they are protruded. It should however be understood, distinctly, that some Injections may have preceded the elevation of Strata to their present height, and that numerous and successive elevations and injections, attended by various degrees of fracture and disturbance, have prevailed in various localities during all periods, and throughout all formations; from the first uprising of the earliest Primary rocks, to the most recent movements produced by existing Volcanoes. M. Elie de Beaumont has discovered probable evidence of no less than twelve periods of elevation, affecting the strata of Europe.

Examples of the fractures and dislocations attending these movements, and producing faults, are represented in our Section by the lines designated by the letter l. Some of these fractures do not reach to the present surface, as they affected the lower beds at periods anterior to the deposition of more recent strata, which cover unconformably the summits of the earlier fractures. (See l. 1^a. 1². 1³. 1⁶. 1⁷.)

Basalt.

A third series of Igneous Rocks is that which has formed dykes, and masses of Basalt and Trap, intruded into, and overlying formations of all ages, from the earliest Granites to the most recent Tertiary Strata. These basaltic rocks sometimes occur as Beds, nearly parallel to the strata, into which they are protruded, after the manner represented in the carboniferous Limestone of our Section, f. 2. More frequently they overspread the surface like expanded sheets of Lava. Our Section gives examples of Trap under all these circumstances. At f. 1. it intersects and overlies Primary strata; at f. 2. f. 3. f. 4. f. 5. it stands in similar