

of Germany; and farther, I have been seconded in my researches by my friends; so that I now possess upwards of forty different species of crystallized chemical combinations produced by fusion, the greater number of which are minerals already known; some are new species, which have not hitherto been met with in nature.

The occurrence of mica, which forms a predominant constituent part of our primitive mountains, as an artificial production, gave rise to the following geological speculations.

The artificial production by fusion, of the minerals which compose our primitive rocks, appears, according to Mitscherlich, to place beyond doubt the theory that our primitive mountains were formerly a melted mass. Such a state of fluidity, he continues, affords an easy explanation of the figure of the Earth, of the increase of temperature as we proceed into its interior, of hot springs, and of many other phenomena. With respect to this theory, we may refer to M. Laplace, who is convinced of its plausibility, without grounding his belief upon the reasons which chemistry presents. I propose, however, to make mention of a few facts, in order to shew with what facility many chemical phenomena in geology may be explained by following this theory.

Primitive mountains are generally distributed over the surface of the earth: it necessarily follows that the bodies which have composed the surface of the earth have participated of the temperature which the primitive mountains have had at the period when they were in a fluid state. The temperature at which water boils depends upon the pressure of the atmosphere; and if the temperature of the earth increases, we only require