schist and carboniferous limestones of Mayo and Sligo. Mineral veins are not so abundant in these rocks in Scotland, as in Saxony, Bohemia, &c.: it is generally near the granitic masses that they occur at all. The lead mine of Strontian is one of the most remarkable; it may be looked upon as a metalliferous dyke. Neither hot springs nor mineral waters are common in the British tracts of gneiss or mica schist.

General Inference. - The preceding statements are sufficient to allow of our forming an incomplete notion of the origin and formation of the rocks contained in the gneiss and mica schist system. On a first view of the phenomena, granitic rocks of various composition appear to have been disintegrated, the separated minerals, quartz, felspar, mica, &c., agitated in a peculiar manner in water, re-aggregated in laminæ, and partially collected into beds. At intervals in this process there was formed in the water a chemical precipitate, limestone, seldom in extended strata, frequently in limited lenticular masses, implying a merely local agency. There is no proof, nor any very high degree of probability, that organic beings had been created - no proof of the emergence of land; but evidence of watery movements, different from the agitation of currents or the tide.

To connect all these circumstances together, the least unreasonable *speculation* appears to be that the globe had cooled at the surface, so as to allow of the ocean collecting itself over the granitic basis of the strata; that this ocean was warm, agitated by somewhat like ebullition, traversed by certain gases from below, which aided in the general disintegration of the granite and in the partial precipitation of limestone; and that the general surface of the earth was hotter than the limits of temperature within which organic life has been restricted by Providence.

The general condition upon which all this explanation might be made to depend is the *hypothesis* that the earth at the time of the production of this earliest system of strata, retained within, and communicated to the surface,

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