

view he maintained to the last. That volcanic action had been in progress from the very beginning of geological time, and that it had played an important part in building up the framework of the land in many countries all over the globe, were ideas that seem never to have occurred to him.

We have seen how old was the notion that volcanoes, or "burning mountains," arose from the combustion of subterranean beds of coal. Werner adopted this opinion, which suited his system, and was quite in congenial surroundings there. In 1789, two years after the appearance of his little *Kurze Klassifikation*, he definitely announced, in one of the papers above referred to, what he called the "highly probable conjecture that most, if not all, volcanoes arise from the combustion of underground seams of coal."¹ The coal might be set on fire by spontaneous combustion, and the most vigorous volcanoes would be those starting on the thickest masses of coal. In order to support this belief, it was necessary to furnish evidence of the existence of deposits of coal around volcanoes. And much research and ingenuity were displayed in collecting all the known examples. Not only coal, but every kind of natural inflammable substance was pressed into service, and made to do duty as fuel for the subterranean fires.

It was also obviously needful to maintain that volcanoes must be comparatively modern phenomena. We are told that "it was only after the deposition of the immense repositories of inflammable matter in the Floetz-trap that volcanoes could take place ;

¹ See the paper just cited in Höpfner's *Magaz.* iv. (1789), 240.