

Thus ten years of reflection had only served to make him more positive in maintaining an opinion which the most ordinary observation in his own Saxony ought to have enabled him to disprove and reject. He had not only asserted that basalt is a chemical precipitate, but had placed it among his primitive rocks.

When we remember the long and patient labours of Desmarest before he announced his conclusions regarding the volcanic origin of basalt, we cannot but wonder at the audacity of Werner in discarding these conclusions without comment, and announcing an entirely opposite opinion, rapidly formed on the slender evidence of one or two isolated patches of basalt. It was not as if he claimed to apply his explanation merely to those few cases which he had himself examined; he swept all the basalts of the earth's surface into his net. His view had not even the merit of originality, for, as we have seen, Guettard, among others, had held the opinion that basalt is of aqueous origin. But, announced as a new discovery, with all the authority of the great Freiberg professor, it commanded attention and met with wide acceptance. Even from the time of its promulgation, however, it awakened some opposition, and it became the subject of bitter controversy for fully a generation. Only a month after Werner proclaimed his discovery he was answered by J. K. W. Voigt of Weimar, who maintained the volcanic nature of the very examples cited by the professor.¹ Werner replied, and was

¹ *Bergmänn. Journ.* 1788, 1789, 1791, pp. 185, 347, etc. See also Hoffmann's *Geschichte der Geognosie* (1838), p. 117.