again answered, but soon retired from the combat and devoted his energies to strengthen his theory. As an instance of the wide interest taken in the question, I may mention that even at Berne, where there are no basalts, nor any other traces of volcanic action, the Society of Naturalists of that town offered a prize of twenty-five thalers for the best essay in answer to the question, "What is Basalt: Is it volcanic or is it not?" The successful competitor, after elaborately reviewing all the arguments brought forward by the Vulcanists, pronounced in favour of Werner's views.[1] Werner himself made two contributions to the discussion, one giving his theory of volcanoes,[2] and the other his matured views upon basalt.[3]

Volcanoes and volcanic action, if they were regarded as betokening any potent kind of reaction between the interior and the exterior of our planet, were utterly antagonistic to Werner's conception of the structure and history of the earth. In a world which had entirely resulted from the precipitations and depositions of an ocean of water, there was obviously no place for internal fire. In the system which Werner had so laboriously devised, it was imperatively necessary to treat volcanoes as modern and accidental phenomena, which never entered into the process of the formation of the crust of the earth. Accordingly, in his earliest sketch of his classification of rocks, he placed volcanic rocks among the latest of the whole series. And this

[1] J. F. W. Widenmann, Höpfner's *Magazin für die Erdkunde*, iv. (1789), p. 135.

[2] Höpfner's *Magazin für die Erdkunde*, iv. (1789), p. 239.

[3] *Bergmännisches Journal*, 1789, i. p. 252. See also p. 272.