

the geologist in Auvergne that the arguments which are powerful in Germany have no effect on him here, even though he does not dispute them? May he not be allowed in retort to ask whether the principles which so obviously arise from the phenomena in Central France are not also applicable to the German basalts? At all events, he may contend, we see very little connection between these basalts and ours as regards relations of structure. Would you have us give up our convictions as to the principles which give grandeur, consistency, and simplicity to the explanation of our Auvergne mountains, and adopt views founded on relations which are not to be seen here?"¹

Well might Von Buch conclude by saying that he "stands perplexed and embarrassed." Whatever he may think of the basalts of Auvergne, he will not allow the Vulcanist to wrest his admissions to any general conclusion with regard to the German basalts. "Opinions are in opposition which only new observations can remove."

Von Buch's faith in the Wernerian interpretation of volcanoes and basalt-hills had a rude shaking from his excursions in Italy and Central France. His next great journey taught him that Werner's scheme of geological succession could not be maintained. Before his volume descriptive of the Italian tour was published, he had started for Norway, where he remained hard at work for no less than two years. Among the vast mass of important observations which he made, one that must have greatly impressed him was that in which he satisfied himself that the rocks in the Christiania

¹*Op. cit.* p. 310.