

ments of the author on the writings which he summarises, and the additions which he is thereby enabled to make to the observations already given by him. He confesses that, had he begun his investigations among such isolated patches of basalt as those capping the hills in Cassel and Saxony, he would never have been able to affirm that basalt is only a lava. But he had encountered such perfect demonstration of the volcanic nature of the rock, tracing it with its fresh scorix up to the very craters whence it flowed, that he could not allow this clear evidence to be invalidated, or even weakened, by cases where the volcanic origin had been more or less obscured.

It is at this point in his investigation that the genius of Desmarest shines with a brilliance far above that of any of his Continental contemporaries who concerned themselves with geological problems. Guettard had clearly indicated the volcanic origin of the puys of Auvergne, and no great acumen was needed to follow up the clue which he had thus given. But to trace a pathway through the maze of lavas of many different ages, to unite and connect them all in one method of interpretation, and thus to remove the endless difficulties and harmonise the many apparent contradictions which beset the investigation, was a task which called forth the highest powers of observation and induction. Among the many claims of France to the respect and gratitude of all students of geology, there is assuredly none that ought to be more frankly recognised than that, in her wide and fair domain, she possessed a region where the phenomena were displayed in unrivalled perfection, and that in Desmarest she could