

correction and confirmation of Smith's labors, but a valuable store-house and standard of what had then been done in English geology. Leopold von Buch had constructed a geological map of a large portion of Germany, about the same period; but, aware of the difficulty of the task he had thus attempted, he still forbore to publish it. At a later period, and as materials accumulated, more detailed maps of parts of Germany were produced by Hoffmann and others. The French government entrusted to a distinguished Professor of the School of Mines (M. Brochant de Villiers), the task of constructing a map of France on the model of Mr. Greenough's; associating with him two younger persons, selected for their energy and talents, MM. Beaumont and Dufrénoy. We shall have occasion hereafter to speak of the execution of this survey. By various persons, geological maps of almost every country and province of Europe, and of many parts of Asia and America, have been published. I need not enumerate these, but I may refer to the account given of them by Mr. Conybeare, in the *Reports of the British Association for 1832*, p. 384. These various essays may be considered as contributions, though hitherto undoubtedly very imperfect ones, to that at which Descriptive Geology ought to aim, and which is requisite as a foundation for sound theory;—a complete geological survey of the whole earth. But we must say a few words respecting the language in which such a survey must be written.

As we have already said, that condition which made such maps and the accompanying descriptions possible, was that the strata and their contents had previously undergone classification and arrangement at the hands of the fathers of geology. Classification, in this as in other cases, implied names which should give to the classes distinctness and permanence; and when the series of strata belonging to one country were referred to in the description of another, in which they appeared, as was usually the case, under an aspect at least somewhat different, the supposed identification required a peculiar study of each case; and thus Geology had arrived at the point, which we have before had to notice as one of the stages of the progress of Classificatory Botany, at which a technical *nomenclature* and a well-understood *synonymy* were essential parts of the science.

Sect. 3.—Geological Nomenclature.

By Nomenclature we mean a *system* of names; and hence we can-