

as was pointed in an earlier chapter, when an orthodox disciple of Werner had relegated a mass of deposits to the Transition series, or the Floetz or the Independent Coal-formation, as the case might be, he considered that all that was really essential had been ascertained, and his interest in the matter came practically to an end.

But the extraordinary awakening which resulted from the labours of Soulavie, Lamarck, Cuvier, Brongniart and William Smith, invested the strata with a new meaning. As stratigraphical investigations multiplied, the artificiality and inadequacy of the Wernerian arrangement became every day more apparent. Even more serious than the attacks of the Vulcanists, and the disclosure of eruptive granites and porphyries among the Transition rocks, were the discoveries made among the fossiliferous stratified formations. It was no longer possible to crowd and crush these rocks within the narrow limits of the Wernerian system, even in its most modified and improved form. The necessity for expansion and for adopting a perfectly natural nomenclature and classification, based upon the actually observed facts, as these were successively ascertained, made itself felt especially in England and in France. Hence arose the curiously mongrel terminology which is now in use. Certain formations were named from some prominent mineral in them, such as Carboniferous. Others were discriminated by some conspicuous variety of rock, like the Cretaceous series. Some took their names from a characteristic structure, like Oolitic, others from their relative position in the whole series, as in the