

PRELIMINARY NOTICE.

The history of the formations above the Chalk having been already fully treated in the memoirs of Messrs. Webster and Buckland, little besides the task of compilation remained to the editors with regard to the subjects embraced in the first book.

With reference to the formations comprised in the second Book, the general history of the Chalk has long been known, but no attempt to trace its details was previously in existence. The sands beneath the chalk, as far as they are exhibited on the coasts of the Isle of Wight and Dorsetshire, had been ably illustrated by Mr. Webster, but all the materials connected with their distribution in other parts of the island are entirely new, including a tolerably full description of the Wealds of Kent, Surry, and Sussex.

The general outlines of the whole Oolitic series were (as has been fully stated in the Introduction) first sketched by Mr. Smith; but, with the exception of a few extremely brief notices inserted by that gentleman in his "Strata identified by their organic remains," and the descriptions in the Rev. Mr. Townsend's *Vindication of Moses*, nothing had been published on the subject; almost all the details in this part of the present work are therefore strictly original.

No general accounts of the New Red Sandstone and Magnesian Limestone formations were extant, and but little assistance was to be derived from the few and partial notices which had appeared. Mr. Winch's account however of the small portion of this tract which fell under his observation, deserves favorable mention.

Though very valuable materials were extant in the descriptions of the Northumberland and Derbyshire Coal-fields by Messrs. Winch, Whitehurst, and Farey, yet a regular and connected account of the Coal-districts of this country remained a desideratum. The editors are inclined to rest the claims of the present work to public notice very principally on the information now for the first time brought together on this most important subject.

The articles pointing out the relations of the English formations to those of the continent, are also among the most original, and it is hoped most useful portions of the volume. While it was passing through the press a very able memoir on this subject by Professor Buckland appeared, which was shortly followed by a series of essays in the *Annals of Philosophy* by Mr. Weaver, containing an excellent outline of the researches of Friesleben, Raumer, &c. in the north of Germany. We have availed ourselves of both these sources, but the general outlines of the plan were previously laid down, and the greatest part of its details have never before been collected together.