

and to him we owe the attempt, in most instances successfully made, to ascertain by precise determinations the various and important members of this series, and to trace them from one extremity of the island to the other. In this enterprize (sufficiently arduous to try the powers and establish the reputation of any individual entering upon ground hitherto untrodden) he may perhaps in some instances have suffered a few omissions to escape without detection, and more rarely have identified too hastily beds in distant parts of the country really belonging to different formations; but still the great mass of his divisions remains unquestioned and unquestionable, and has been adopted, though with an occasional change of nomenclature, and a few requisite corrections, by all the geologists who have followed his steps, as well as in the present work. The carboniferous districts are also on the whole represented with a near approach to correctness, but are far inferior in this point to those occupied by the series last mentioned, and here there was also extant a greater quantity of previous materials; the districts of old red sandstone, and those occupied by the transition and primitive rocks, are very inadequately represented.

Subsequently to the publication of Mr. Smith's map in 1819, another on nearly the same scale was published by Mr. Greenough; the execution of this is more minute and delicate, and the details more exactly laboured; the general configuration of the surface of the country, its hills and vallies, are represented with far more precision than had previously been attempted in any general map of the island,—points which did not enter into the construction of Mr. Smith's map; and many of the imperfections of the former are removed: to this therefore we have referred as a general standard throughout the work, and have therefore studiously noted every remaining incorrectness which a careful collation of it in the course of our enquiries with the materials derived from subsequent observation has enabled us to detect: from this also we have copied the slight outline map prefixed to this volume, with a trifling change in the system of colouring which a different view of the division of a part of the carboniferous series of rocks has obliged us to introduce, and some other deviations which will be accounted for in the explanation of the map and plates.

The able investigation of the formations above the chalk by Mr. Webster, and his comparative views of their relation to those similarly situated in the basin of Paris, have supplied an important desideratum in the history of our strata; which has been also still more largely indebted to the general and extensive researches of Professor Buckland; who has materially improved the arrangement of Smith; has been the first to effect