

PREFACE TO THE THIRD EDITION.

THE First and Second Editions of the *Introduction to Geology* were favourably received, and sold off, soon after their publication. The work has since been translated and published in Germany, by Mr. Frederick Muller of Friburg; but it has been long out of print in this country. The causes which have retarded the publication of a Third Edition it is unnecessary to mention: the delay has, I trust, been favourable to its appearance in a very improved state; as I have been collecting materials for it, during several years, having visited almost every situation of much geological interest in our own island, from the Land's End in Cornwall, to the Grampian Mountains in Scotland; and passed part of three years in examining the geology of Savoy, Switzerland, and France. There is scarcely a rock formation described in the present volume, that I have not examined in its native situation, and compared with the descriptions of former geologists. I have also had opportunities of examining the collections, and of profiting by the communications, of some of the most eminent geologists on the Continent.

While engaged in these pursuits, I have not been inattentive to the labours of other observers. So numerous and interesting are the discoveries made in geology during the last ten years, that in order to present a concise view of the science in its present advanced state, the *Introduction to Geology* has been recomposed, and all the Chapters are greatly enlarged.

The following new Chapters have been added.—Chap. II. On Fossil Organic Remains. Chap. IV. On the Principles of Stratification. Chap. X. A Retrospective View of Geological Facts. Chap. XVIII. On the Destruction of Mountains; and on the Bones of Land Quadrupeds, found in Diluvial Depositions and in Caverns. Chap. XIX. On the Formation of Valleys; and on Deluges and Denudations.—The Plates are new, except Plate IV. and part of Plate VII.

The Outline Map of the Geology of England and Wales, was I believe, when published in the First Edition of 1813, the only geological map of England that had then appeared. It presents in one view the grand geological divisions of the country, without delineating the different strata in each division. Mr. William Smith has since published a map of the Geology of England, which possesses extraordinary merit,—when it is considered as the unaided attempt of one person, to trace the course of each rock formation through England and Wales. Mr. Greenough, and other members of the Geological Society of London, have subsequently published a geo-