

P R E F A C E.

DURING the period which has elapsed since the publication of the last edition of Professor Phillips' Manual, no departments of science, probably, have advanced so rapidly, or with so much scientific acumen, as Geology and its handmaid, Palæontology—two branches of knowledge so closely interwoven that the one can only be understood through the other; the history of the Sedimentary Rocks and their stratigraphical relations being determined by the Succession of Life in time and its Distribution in space. So extensively, indeed, has the science of Geology grown—in its widest and fullest sense—that no one mind can hope to grasp in their entirety the great truths and facts that have, during the last fifty years, enriched its literature in every quarter of the globe.

In 1854, Professor John Morris published the Second Edition of his Catalogue of British Fossils, then numbering 1280 genera and 4000 species. Since that date 3000 genera and nearly 12,000 new species have been described, thus bringing up the muster-roll of extinct life, in the British islands alone, to 3680 genera and 16,000 known and described species.

So great an addition to the literature of palæontological Geology called for the extension and revision of Professor Phillips' Manual, a work which, at the time of its publication, was the only one that dealt almost exclusively with the succession of the stratified rocks and their associated life-contents. As far as possible, the original *plan* of Phillips has been adhered to; but of the *text* itself, few pages of the edition of 1855 now remain.

One hundred and sixteen tables of organic remains have been prepared, and brought down to 1884, embracing the accumulated wealth of the labours of past and present investigators during the last thirty years. Eleven of these tables contain every known British genus, zoologically or systematically placed, and with the number of species in each, showing their broad distribution through time. The remaining 105 tables are devoted