

here shown, to be widely spread over both continents, and to mark the latest known period in the genesis of crystalline stratified rocks; and, secondly, because this Taconian series has been by some geologists supposed to represent one of the stages in an imagined process of regional metamorphism by which one and the same group of uncrystalline paleozoic sediments has been made to assume successively, in contiguous areas, the characters of the various crystalline series from the Taconian down to the Laurentian, both included. To expose the fallacies of this ancient error, and to clear up many of the obscurities which it has thrown alike over the history of these groups of crystalline rocks and the succeeding Cambrian and Ordovician strata, it was found necessary to examine in some detail the record of stratigraphical research in the pre-Silurian areas of North America, and in so doing to render justice to the work of Amos Eaton, who, more than fifty years since, laid on a sound basis the foundations of American geology.

In a volume of selected papers, published by the author in 1874, with the title of *CHEMICAL AND GEOLOGICAL ESSAYS*, in which were discussed the geognostic relations of the Appalachians, of the Alps, and of the Cambrian and Silurian rocks of North America and Europe as known up to that time, the outlines of the present stratigraphical scheme for the eozoic and the lower paleozoic rocks were already, for the greater part, defined; but the true relations of the Taconian were not then understood. In a Preface to a second edition of that volume, in 1878,\* the Taconic question was, however, reconsidered (pp. xix-xxvi), and the author's present conclusions are there briefly set forth.

The volume just named contains, moreover, essays on

\* *Chemical and Geological Essays*, by Thomas Sterry Hunt, 2d ed., 1878, 8 vo., pp. xlvii. and 489. S. E. Cassino, Salem [now of Boston], Mass.