

territory under consideration occupies an area of about half a million of square miles (Proceedings of Geol. Soc. of London, November, 1842, Vol. iv., p. 1), and meets Mr. Taylor's Survey of the Pennsylvanian coal-field on the north-east, and the Cretaceous plain described by Conrad and Featherstonehaugh to the south.

*New York State Survey, 1836—1842.*

The State of New York having been divided into four districts, the geological survey of the first of these, comprehending the southern counties, was assigned to Mr. Mather, that of the second or northern counties to Dr. Emmons, the third district or central counties to Mr. Lardner Vanuxem, and the fourth or western region to Mr. James Hall.

The large map, comprising the result of their joint labours, has not appeared, but a compendium of it has been given by Mr. Hall in his geological map of the Middle and Western States, published in his Final Report, Albany, 1843. To this map, by Mr. Hall, and to that already mentioned by Dr. Dale Owen, I have been indebted for the principal portion of that part of my map which contains the Government Surveys of the Union.

Mr. Hall's map comprehends a sketch of the geology of Michigan, with which he was furnished by Dr. Houghton, the government surveyor of that State, who must therefore be considered as my authority for this region.

The observations of Dr. Hildreth, in the twenty-ninth volume of Silliman's Journal "on Ohio," &c., of Professor J. T. Ducatel, in Maryland, and Pro-