

§ 158. In giving its distribution he says (p. 71):

The Black Slate is not as well exposed as the Taconic; there is, therefore, some uncertainty in regard to it. It is the rock adjacent to the Champlain and Hudson Valleys, and more frequently that which we observe immediately beneath the calciferous sandrock, or cropping out from beneath it. What we see of it is frequently in a crushed condition, and bounding the Taconic Slate on the west in New York and Vermont. I have not recognized it about Albany or Troy. Greenwich, in Washington County, is the most southern point at which I have observed it. It extends north as far as St. Albans, in Vermont. I speak of those points which I have inspected. On St. Albans Bay it is traversed by satin spar. It is also calciferous here, as well as at numerous points upon Lake Champlain. It crops out beneath the calciferous sandstone at Sharpshins, near Burlington. I am unable to form an estimate of its thickness.

§ 159. Of the Taconic Slate of the 1842 report (section 6) he says (p. 72):

The Taconic Slate, with its subordinate beds, occupies almost the whole of Columbia, Rensselaer, and Washington Counties. It extends to the base of the Taconic range of mountains, which divides New York from Massachusetts and Vermont. Lying in its usual inclined position, if no repetitions of the same mass occur, it is of immense thickness. For example, from Lansingburg to the Sparry limestone in the eastern part of Hoosic, near the western bounds of Bennington, in Vermont, it is at least twenty miles in a direct line. Its dip varies from 45° to 70° . But admitting that the same mass reappears, it will still be found immensely thick. I have often examined it two miles perpendicular to its strike, and found no indication of repetitions. I leave it to a future opportunity to make an approximate determination of its thickness, or to others who may take up the subject.

Without doubt this immense rock admits of subdivisions; that is, it will probably be found proper to make those masses which I have treated as subordinate independent rocks, of which perhaps others still will be recognized of sufficient importance to merit the same distinction. In whatever light we may regard these minor points, there is no doubt that the quantity of matter in this slate exceeds that of all the members of the New York System put together.

The Sparry limestones and other strata to the east are next described.

§ 160. Dr. Emmons again gives a résumé of the Taconic System in 1855 (Amer. Geol., pt. 2). On pages 5 and 6 he says:

My first business is to sketch a picture of the oldest of the sediments as they are exhibited in a series which collectively constitute the Taconic System, and as it is developed in the Taconic ranges of Berkshire and the adjacent country immediately north and south.

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The Taconic System has a clear and well-defined base, which is rarely obscured by passages into the primary schists, the pyroplastic rocks, sienites, or granites.

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If my views are correct (and I have endeavored to sift them of error), we can go back no further; we have no older sediments.

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The evidence of the existence of a system of rocks beneath and older than the Silurian System in this country rests on many well-determined facts. These facts are not all of equal importance; but those which are not direct serve to corroborate and sustain those which are. The facts which bear directly upon the evidence alluded to are superposition, succession, unconformability, and the presence of fossils distinct from those of the Silurian System.

§ 161. On page 12 we have the first proposition to divide the Taconic