218

In 1862 Thomas Macfarlane, who was familiar with the crystalline schists of Norway, which there underlie the Cambrian, compared them with those of the Green Mountain range and of the great lakes already noticed, and concluded that they are all essentially similar, lithologically. Bigsby, the earliest scientific observer of these rocks in the Northwest, moreover announced independently, in 1863, their apparent identity with the crystalline schists of Scandinavia. In the Geology of Canada 1863, I called attention (p. 705) to these resemblances, mentioning that the crystalline schists of the north shore of lake Super-

ior "recall the strata of the [altered] Quebec group."

The whole question of their probable identity, and of the great antiquity of these crystalline schists of the Green Mountain range as evinced by the pebbles and fragments found at different localities in the uncrystalline lower paleozoic sediments was at that time repeatedly discussed with Logan, but, as I have elsewhere said, "official reasons then and for some years afterward prevented the writer from expressing any dissent from the views of the director of the geological survey of Canada." It was not until after having spent some months in 1869 and 1870, in geological studies along the southern coast of New Brunswick, and made examinations at various points on the coasts of Maine, Massachusetts and Rhode Island, that I ventured to declare in October 1870, in a communication to the Boston Society of Natural History, (Proceedings XIV, 45, 46,) entitled "Notes on the Geology of the vicinity of Boston," that the crystalline schists (previously described as altered Devonian), which near St. John, New Brunswick, underlie unconformably the Cambrian sediments, belong to the same series as those underlying such sediments near Boston; classing them moreover with similar crystalline rocks at Newbort. Rhode Island, and on the coast of Maine. It was then said "to the same series I refer the great range of gneissic and dioritic rocks with serpentines, chloritic, taleose and epidotic schists which stretches through western New England," that is to say, the Green Mountain range. In a farther notice of this series of rocks in February, 1871, it was added, "they apparently belong * * to the great Huronian system," (Amer. Journ. Science III., 1, 84). See also Azoic Rocks, being Report E., second geological survey of Pennsylvania, page 114. Having reached this point, the attention of Logan was once again invited, and