

bottom of the group, was long regarded as the oldest fossiliferous rock in America. It is certainly not far from the lowest horizon of the primeval cemeteries which hold the dust of the first denizens of our planet. This sandstone is sometimes whitish or grayish, but often of a dull red color, and sometimes slaty; and except within the area covered by the St. John's group, it is found resting upon the upturned edges of the Eozoic strata. Observe that it is a sandstone. Now we know that in the waters of the present day, sands are accumulated only in comparatively turbulent and shallow regions. In calmer and deeper waters, the sediments are necessarily finer, as only the finest particles can be transported by the slowest moving currents (compare Fig. 15). Moreover, many a layer of this ancient

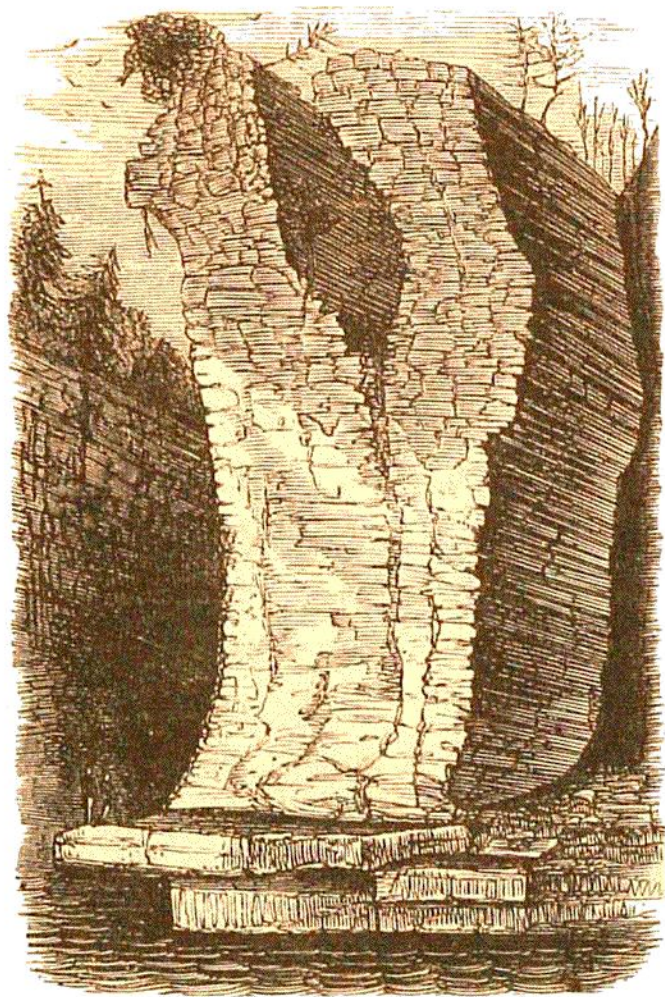


Fig. 22. Cliffs of Potsdam Sandstone on the Au Sable River, New York.

sandstone, when uncovered to the light, presents us with veritable ripple marks—such as the waves are making to-day in the fine sand of the shallow water near the beach—sand-ripples which have been preserved unmarred for millions of years, and unite with other proofs that the bottom of the Protozoic sea was not beneath the reach of the agitations of its surface. This interesting sandstone was first attentively studied at Potsdam and Keeseville, in