tion of this kind at Kinnekulle in Sweden, and in the U. S. at Little Falls on the Mohawk; and afterwards on the western borders of Lake Champlain in the U. S. At Little Falls, however, the ancient strata, which rest upon gneiss, do not belong precisely to the same part of this lower member of the Silurian series as those at Montmorenci, but to the beds next above the Potsdam; namely, those called the calciferous sandrock by the New York surveyors. This circumstance should serve as a warning against the hasty assumption that in any of these sections we have positively arrived at the lowest stratum containing organic remains in the crust of the earth, or have discovered the relics of the first living beings which were imbedded in sediment.

When reasoning on this subject, we must not forget that the oldest formations are those which must have suffered the greatest loss by aqueous denudation, and which have been most extensively altered by plutonic action. We must also remember how small a part of the earth's crust is accessible to human observation, three-fourths of the surface of the globe being submerged beneath the ocean, and a fraction only of the remaining portion having been as yet carefully investigated by geologists. Nor must we overlook the large spaces occupied by formations newer than the Silurian, which may conceal from our view fossiliferous strata older than any yet brought to light.

As it is still a favourite theory of many geologists, that the granite and other formations, both stratified and unstratified, which I have called hypogene, were produced in far greater abundance before the origin