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ARTICLE LVI.—On American Geological History :—Address before the American Association for the Advancement of Science, August, 1855, by JAMES D. DANA.*

(Concluded.)

As plants may live in water too hot or impure for animals, and moreover, since all nature exemplifies the principle that the earth's surface was occupied with life as soon as fitted, and with the highest forms the conditions of the time allowed, we may reasonably infer that there may have been in Azoic times marine species and plant-infusoria forms adapted to aid in the earth's physical history; and thus vegetation may have long preceded animal life on the globe.[†]

^{*} Silliman's American Journal of Science, November, 1856.

⁺ The evidence with respect to the existence of plants in the Azoic Age, though by no means positive, is stronger than here stated.—In the *first* place, there are *limestones* among the folded strata; and as limestones of later ages were almost wholly of organic origin, these of Azoic rocks may