also their fucoidal impressions, blent with graptolites; they are present in North America as those Potsdam sandstones of the States' geologists in which fucoids so abound, mixed with a minute lingula, that they impart to some portions of the strata a carboniferous character. But with these deep-lying beds in all the several localities, thousands of miles apart, in which their passage into the inferior deposits has been traced, fossils cease. And why cease with them? In one locality the ancient ocean may have been of such a depth in the period immediately *previous*, and represented, in consequence, by the strata immediately *beneath*, that no animal could have *lived* at its bottom,—though I do not well see why the remains of those animals who, like the shark and pilot-fish, are frequently seen swimming over the profoundest depths, might not, did such exist at the time, be notwithstanding *found* at its bottom; or in another locality every trace of organization in the nether rocks may have been obliterated, at some posterior period, by fire. But it is difficult to imagine that that uniform cessation of organized life at one point, which seems to have conducted Sir Roderick Murchison and Professor Sedgwick to their conclusion, should have been thus a mere effect of accident. Accident has its laws, but uniformity is not one of them; and should the experience be invariable, as it already seems extensive, that immediately beneath the fucoidal beds organic remains cease, I do not see how the conclusion is to be avoided, that they represent the period in which at least *existences capable of preservation* were first introduced. Every case of coincident cessation which has occurred since the determination of the second case, must be reckoned, not simply as an additional unit in evidence, but, on the principles which determine mathematical probability, as a unit multiplied, first by the chances against its occurrence, re-