

rise into the remote past, and take farewell, one after one, of even the lower forms,—shells and corals,—and get into a formation all of whose visible organisms are old-fashioned and extinct, we apply the microscope to its impalpable dust, and again, among still humbler and lowlier shapes, find ourselves in the presence of the familiar and the recent. In another sense than that which the old poet contemplated, we learn from the history of species that the most lowly are the most safe.

‘ The tallest pines feel most the power
Of wintry blasts ; the loftiest tower
Comes heaviest to the ground.
The bolts that spare the mountain side
His cloud-capt eminence divide,
And spread the ruin round.’

How long some of these extinct species may have lived we know not, and may never know ; but in all cases their term of existence must have been very extended. Even the extinct elephant lived long enough as a species to whiten the plains of Siberia with huge bones, and to form quarries of ivory that have furnished the ivory market for year after year with its largest supplies. And of some of the humbler species of animals the period during which they have continued to live must have been vastly more protracted. *Cyprina Islandica* seems to have come into existence at least as early as the fossil elephant ; and now, thousands of years after the boreal pachyderm is gone, the boreal shell still exists by millions, and evinces no symptom of decline. And yet, since the commencement of the great Tertiary division, series of shells, as hardy, apparently, as *Cyprina*, have in succession come into being, and then ceased to be. The period over which we have passed includes *generations* of species. But there was space enough for them all in the bygone eternity. It has sometimes appeared to me as if, from our own weak inability to conceive