time oaring their way, back below, along the surface of the sea, at another, back above, along the bottom. But some of these Entomostraca of the old Silurian ocean were, compared with their modern representatives, of great size. The *Homalonotus delphinocephalus* had a carapace as large as that of an ordinary market-crab, and the *Asaphus tyrannus* and *Isoletus megistos* were each of them as large animals, though different in their proportions, as ordinary market-lobsters. But it seems to have been characteristic of both the flora and fauna of these ancient times, that many of their characteristic forms should unite great size to a humility of organization restricted in the present ages to forms comparatively minute. The Trilobites of the Silurian system, like the Club-mosses and Equisetaceæ of the Coal Measures, were of a Brobdingnagian cast; and, regarded as Entomostraca, we must hold—to return to a former illustration—that we look upon them with eyes sharpened by an experience acquired among the productions of Lilliput. So far as we yet know, the higher contemporaries of the Trilobite in Scotland were chambered shells of two well-marked genera,—that of the Orthoceratite, a long, straight, horn-shaped shell; and that of the Lituite, which may be described as an Orthoceratite curled up into a scroll. And, associated with these, we find some of the low brachiopodous molluscs of the more ancient types, such as Leptenæ, Orthes, and Spirifers. But by far the most characteristic organisms of our Scottish Silurians belonged to a low zoophytic family, allied by some of their affinities, in some of their genera, to the sea-pens, and by certain other affinities, in some of their other genera, to the Sertularia. They are known to the geologist by the general name of Graptolites. The Sertularia, compound, plant-like animals, that resemble miniature bushes in spring, just as the buds are bursting into leaf, are attached always, by their seeming roots, to rocks, shells, or sea-weed, and so require