

this area was originally united to that which borders the Firths of Moray and Dornoch, and from thence on to the sandstones of Caithness and the Orkneys, I cannot tell, though it has been usually stated that the eastern side of the Lower Silurian rocks and the Grampian heights were continuously fringed by Old Red Sandstone. It seems to me, however, to be not unlikely, that as the great Grampian range south of the Dee even now attains to heights of about 2,000 feet in Kincardineshire, in older times, having suffered much less from denudation, they were higher than now, stretched further east, and possibly formed an effectual barrier between two lake-areas in which Old Red Sandstone was deposited. But even if the red sandstones of the whole of Scotland were once united to those of the coast of Norway, *in one continuous stretch of inland water*, it is not without parallel in the living world, for the brackish Caspian lake occupies a larger area, and it has been said that even in historical times the Caspian was larger than now. The great fresh-water lakes also of North America, from Lake Superior to Lake Erie, exclusive of Ontario, occupy an area far larger than the whole of Scotland with all its islands. Three of these lakes, Superior, Michigan, and Huron, practically form one sheet of water, united by straits somewhat analogous to those of the Bosphorus and Hellespont; and the lowest of these, Lake Huron, is only 37 feet below the level of Lake Superior, while Erie is 36 feet lower than Lake Huron, with a distance of more than 70 miles between them, part of which is occupied by Lake St. Clair.

When we try to realise the kind of scenery of this old period, we are led to something of this kind. The lake or lakes, was or were, more or less encircled by high