It is interesting to notice here that the Laurentian rocks thus interpreted show that the oldest known portions of our continents were formed in the waters. They are oceanic sediments deposited perhaps when there was no dry land, or very little, and that little unknown to us, except in so far as its *débris* may have entered into the composition of the Laurentian rocks themselves. Thus the earliest condition of the earth known to the geologist is one in which old ocean was already dominant on its surface; and any previous condition when the surface was heated, and the water constituted an abyss of vapours enveloping its surface, or any still earlier condition in which the earth was gaseous or vaporous, is a matter of mere inference, not of actual observation. The formless and void chaos is a deduction of chemical and physical principles, not a fact observed by the geologist. Still we know, from the great dykes and masses of igneous or molten rock which traverse the Laurentian beds, that even at that early period there were deep-seated fires beneath the crust; and it is quite possible that volcanic agencies then manifested themselves, not only with quite as great intensity, but also in the same manner, as at subsequent times. It is thus not unlikely that much of the land undergoing waste in the earlier Laurentian time was of the same nature with recent volcanic ejections, and that it formed groups of islands in an otherwise boundless ocean.

However this may be, the distribution and extent of these pre-Laurentian lands is, and probably ever must be, unknown to us; for it was only after the Laurentian rocks had been deposited, and after the shrinkage and deformation of the earth's crust in subsequent times had bent and contorted them, that the foundations of the continents were laid. The rude sketch map of America given in Fig. 3 will show this, and will also show that the old Laurentian mountains mark out the future form of the American continent.