

somewhat dried up. It has a large and intensely hard stone and kernel, a thin pulp made up of two layers, an inner, more dense and dark-coloured, and an outer, less dense and lighter-coloured. These constitute the under-crust. On the outside it has a thin membrane or over-crust. In the process of drying it has slightly shrunk, so as to produce ridges and hollows of the outer crust, and this outer crust has cracked in some places, allowing portions of the pulp to ooze out—in some of them its lower dark substance, in others, its upper and lighter material. The analogy extends no farther, for there is nothing in our withered fruit to represent the oceans occupying the lower parts of the surface, or the deposits which they have laid down.

Here a most important feature demands attention. The rain, the streams, and the sea are constantly cutting down the land and depositing it in the bed of the waters. Thus weight is taken from the land, and added to the sea bed. Geological facts, such as the great thickness of the coal measures, in which we find thousands of feet of sediment, all of which must have been deposited in shallow water, and the accumulation of hundreds of feet of superficial material in deltas at the mouth of great rivers, show that the crust of the earth is so mobile as to yield downward to every pressure, however slight.¹ It may do this slowly and gradually, or by jumps from time to time; and this yielding necessarily tends to squeeze up the edges of the depressed portions into ridges, and to cause lateral movement and ejection of volcanic matter at intervals.

Keeping in view these general conclusions, let us now turn to their bearing on the origin and history of the North Atlantic.

Though the Atlantic is a deep ocean, its basin does not constitute so much a depression of the crust of the earth as a flattening of it, and this, as recent soundings have shown, with a slight ridge or elevation along its middle, and banks or terraces fringing the edges, so that its form is not so much

¹ Starkie Gardiner, *Nature*, December, 1889.