

detached groups of islands. There is, first, the British group, little different in form and extent from what it is now, save that the south-eastern corner of England is cut off diagonally, from the Wash to the Isle of Wight; next the Swedish and Norwegian group, consisting mainly of one great island: and then a still larger group than either, scattered over the existing area of France, Southern Austria, part of Turkey in Europe, and part of Italy. Running through the midst, there is a broad ocean sound, that stretches across, where it opens into the German Sea, from Norway to Dover, and that then expands in breadth, and sweeps eastwards, — covering in its course the beds of the Black and the Caspian Seas, — into the great Asiatic basin. And in this Europe of shreds and fragments, — of detached clusters of islets, with broad ocean channels flowing between,

boundary between the opposite currents would be between the latitudes of  $28^{\circ}$  and  $30^{\circ}$ , where a zone of still water would exist; and their *maximum* effort would be near the equator, and within the polar circle. When the land was rising, and near the surface of the water, or partially above it, the currents would produce the phenomena of Crag and Tail. The crag or head would point to the east within the tropics, and to the west in the temperate regions. The current would of course not flow invariably in one precise direction, but be occasionally deflected by high lands to the north or south of its true direction. We must keep in mind also, that though not perhaps very strong, it would be constant; and that transitory storms and hurricanes would generally incorporate themselves with it, and augment its force. A temporary current evidently would not explain the facts. If the same agent swept away the solid rocks which once environed and covered Arthur's Seat and North Berwick Law, and also deposited the tail of clay and gravel lying behind these mountains, it must have acted for thousands of years. But it is more probable that there were two or more currents at distant epochs. Perhaps New Holland, New Guinea, Borneo, the Philippines, and Spice Islands, may be the remnants of what was once the southern prolongation of the Asiatic continent, and which had been breached and divided by the tropical current before Africa and South America rose from the deep to arrest its free course. The idea, however, is thrown out merely as a conjecture on a subject requiring much additional investigation."