point of meeting; and it is as little improbable that they should have met in the remote past some two or three hundred miles to the west of what is now Scotland, as that in the existing period they should meet some two or three hundred miles to the east of what is now Newfoundland. northern current would be deflected by the more powerful gulf stream into an easterly course, and would go sweeping over the submerged land in the direction indicated by the grooves and scratches, bearing with it, every spring, its many thousand gigantic icebergs, and its fields of sheet-ice many hundred square miles in extent. And these, armed beneath with great pebbles and boulders, or finding many such resting at the bottom, by grinding heavily along the buried surface,—like the rafts of my illustration along the bed of the river,-would gradually wear down the upper strata of the softer formations, leaving the clay which they had thus formed to be deposited over, and a little to the east of, the rocks that had produced it. It is further in accordance with this theory, that in Scotland generally, the deeper deposits of the boulder-clay occur on the eastern The cutler, in whetting a tool with water on line of coast. a flat Turkey stone, drives the grey milky dressings detached by the friction of the steel from the solid mass, to the end of the stone furthest from himself, and there they accumulate thick in the direction of the stroke. And so it is here. The rubbings of the great Scotch whetstone, acted upon by the innumerable gravers and chisels whetted upon it, and held down or steadied by the icebergs, have been carried in the easterly direction of the stroke, and deposited at the further, that is to say, the eastern, end of the stone.

But fearing I have already too much trespassed on your time and patience, I shall leave half told for the present the story of the Pleistocene period in Scotland. If, instead of presenting it to you as a piece of clear, condensed narrative, I have led you darkly to grope your way through it by a