

sandstone beneath formed a portion of that ancient Old Red system which represents, as is now known, the second great period of vertebrate existence on our planet, and which has proved to the palæontologist so fertile a field of wonders : the pale clay above was a deposit of the boulder-clay, resting on a grooved and furrowed surface of rock, and containing in abundance its scratched and polished pebbles. Old Red Sandstone and boulder-clay ! a broad bar of each ;—such was the compound problem propounded to me by the Fate that dropped me in a quarry ; and I gave to both the patient study of years. But the older deposit soon became frank and communicative, and yielded up its organisms in abundance, which furnished me with many a curious little anecdote of their habits when living, and of the changes which had passed over them when dead ; and I was enabled, with little assistance from brother geologists, to give a history of the system to the world more than ten years ago. The boulder-clay, on the contrary, remained for years invincibly silent and sullen. I remember a time when, after passing a day under its barren *scaurs*, or hid in its precipitous ravines, I used to feel in the evening as if I had been travelling under the cloud of night, and had seen nothing. It was a morose and taciturn companion, and had no speculation in it. I might stand in front of its curved precipices, red, yellow, or grey (according to the prevailing colour of the rocks on which it rested), and might mark their water-rolled boulders of all kinds and sizes sticking out in bold relief from the surface, like the protuberances that roughen the rustic basements of the architect ; but I had no ‘*Open, Sesame*’ to form vistas through them into the recesses of the past. And even now, when I have, I think, begun to understand the boulder-clay a little, and it has become sociable enough to indulge me with occasional glimpses of its early history in the old glacial period,—glimpses of a half-submerged land, and an iceberg-mottled sea, turbid with the comminuted débris of the rocks