

a streamlet. After every shower the stream comes down brown and turbid with the more argillaceous portions of the deposit ; accumulations of sand are swept to the gorge of the ravine, or cast down in ripple-marked patches in its deeper pools ; beds of pebbles and gravel are heaped up in every inflection of its banks ; and boulders are laid bare along its sides. Now, a separation by a sort of washing process of an analogous character seems to have taken place in the materials of the more exposed portions of the boulder-clay, during the emergence of the land ; and hence, apparently, those extensive beds of sand and gravel which in so many parts of the kingdom exist in relation to the clay as a superior or upper subsoil ; hence, too, occasional beds of a purer clay than that beneath, divested of a considerable portion of its arenaceous components, and of almost all its pebbles and boulders. This *washed* clay,—a re-formation of the boulder deposit,—cast down mostly in insulated beds in quiet localities, where the absence of currents suffered the purer particles, held in suspension by the water, to settle, forms, in Scotland at least,—with, of course, the exception of the ancient fire-clays of the Coal Measures,—the true brick and tile clays of the agriculturist and architect. There are extensive beds of this washed clay within a short distance of Edinburgh ; and you might find it no uninteresting employment to compare them, in a leisure hour, with the very dissimilar boulder-clays over which they rest. Unlike the latter, they are finely laminated : in the brick-beds of Portobello I have seen thin streaks of coal-dust, and occasionally of sand, occurring between the layers ; but it is rare indeed to find in them a single pebble. They are the washings, in all likelihood, of those boulder-clays which rise high on the northern flanks of the Pentlands, and occur in the long flat valley along which the Edinburgh and Glasgow Railway runs,—washings detached by the waves when the land was rising, and which,