

after clearing up for a brief space, had again overcast, and rain began to fall as heavily as before. We sheltered for a little under the lower basalt. Had we been suddenly spirited away unawares from some of the Scottish glens, and set down at the side of this rock, we should hardly have recognised the change of scene. The basalt is a true bed, some thirty or forty feet thick, and is scarcely distinguishable from certain Carboniferous basalts of the Lothians. It is a hard, dark, compact rock, somewhat rough and scoriaceous towards the bottom, like the basalts along the magnificent coast-section near Kinghorn in Fife. But what especially interested me was, to find that the upper surface of the bed was even and smooth, and that the marls rested on it unaltered, the line of demarcation being sharp and clear. The basalt had undoubtedly rolled over the bottom of the old lake; it rested on lacustrine marls, and strata of the same kind covered it. But its upper surface, so far from rising up into black bristling masses, like the subaerial currents of the Puys, was smooth and even, like the top of a bed of sandstone or limestone, and the marls which succeeded gave no sign of alteration or disturbance. I therefore inferred that the evenness of the upper surface of many Palæozoic and Tertiary basalts in Scotland offered no valid objection to their being of the nature of true lava-currents, poured out at the surface, and not injected at some depth beneath it.

Ascending beyond the prominent zone of basalt, we soon reached a bed of calcareous peperino, or tuff, that at once recalled some of the tuffs associated with parts of the Carboniferous Limestone of Linlithgowshire and Fife, its stratification being confused, sometimes highly inclined, changing its direction, or even disappearing altogether. Similar ashy materials, mingled with calcareous matter,