Forbes has detected trap beds which made their way to the surface, and overflowed the shells and corals of the Oolite, about the middle of the great Secondary period. 'The thick sheet of imperfectly columnar basalt,' says the Professor, 'which has so wide an extension in the island of Skye, and plays so important a part in the formation of the magnificent scenery of its coasts, was the product of a submarine eruption, which, if we regard the basalt as an overflow, has its geological date marked to a nicety, having occurred at the close of the middle and at the commencement of the upper Oolitic period.' Yet again, in the neighbourhood of Edinburgh, as well described by Mr. Charles M'Laren, there are traps of the Palæozoic division,—beds of stratified tuff, as among the rocks of the Calton Hill, for instance,—that belong to the early part of the Carboniferous period; and I have seen at Oban a conglomerate low in the Old Red Sandstone, formed chiefly of a trap, which even at that early time must have been a surface rock much exposed to denudation. We must regard, then, the trap rocks of Scotland as of all ages, from the earlier Palæozoic to the middle Tertiary periods. The great ganoidal fishes of the Devonian and Carboniferous ages, the huge reptiles of the Oolite, and the gigantic mammals of the Miocene, must have been exposed, in turn, in what is now Scotland, to deluging outbursts of molten matter from the vexed bowels of the earth, and to overwhelming showers of volcanic ashes.

I would, however, crave attention to the curious fact, that during this immensely protracted period of Plutonic activity, the deep-seated agencies operated in nearly the same lines. Masses of the incarcerated matter seem to have made their escape age after age along the same weak parts of their prison walls,—the earth's crust; and in Scotland we have two of those lines of apparent weakness which converge in a greatly overflown district in the north of Ireland. One of