

bare by sweeping them away. Let us but imagine that this disturbing rock began to rise under the earlier impulsions of the elevating agencies, and during the deposition of some one of the later secondary formations, as the precursor of the granitic range,—that the superincumbent Lias, already existing in its present consolidated state, opened into yawning rents and fissures over it, as the earth opened in Calabria during the great earthquake,—and that the loose sand and calcareous matter which formed the sea-bottom at the time, borne downwards by the rushing water, suddenly filled up these rents, ere the yielding matrix had time to lose any of its steepness of side or sharpness of edge, which it could not have failed to have done had the process been a slow one. The sandstone dikes, apparently Oolitic, mark, it is probable, the first operations of those upheaving agencies to which we owe the elevation of the granitic wall, and which, ere they accomplished their work, may have been active during occasional intervals for a series of ages. I am not of opinion that the accompanying marks of alteration among the shales and limestones of the beds are sufficiently unequivocal to render imperative some more fiery theory.

CONTEMPORARY AND EXTINCT TYPES OF THE LIFE OF THE
TEREBRATULA.

WE find among the earliest bivalves of the Silurian system the delicate *Terebratula*, with its punctured umbone; we follow it downwards through all the various formations, and see it appearing on each succeeding stage, specifically new, but generally old, until, quitting the rocks with their dead remains, we pass to the existing testacea of our seas, and find among them the ancient *Terebratula* still extant as a living shell. Contemporary as a genus with every extinct form of animal life, we find it contemporary with the last of created