

which corresponds in this genus to the inclosing wall of *Isastrea*, is very apparent in weathered specimens, but, as in *Thamnastrea Lyellii*, only faintly visible in those that are less worn; while, as in the species *Thamnastrea scita*, the columella, if it at all possessed one, was rudimentary. I have usually found this species encrusting masses of indurated Old Red Sandstone of the flagstone formation, which must have been as ancient a looking rock in the times of the Oolite as it is now, and, when laid open by the waves along the beach, must have exhibited its ichthyolitic remains in their present state of keeping. In fine, in its rocks and stones this beach of the Oolite on what is now the eastern coast of Sutherland must have resembled that of the neighboring county of Caithness in the present day. And, as on the latter shore, as we approach the line of extreme ebb, we find rolled masses of dark gray flagstone, partially covered with pale-colored nulliporite encrustations, there would have been found, had there been an inquiring eye to prosecute the search, similar dark gray masses, bearing their encrustations of *Thamnastrea*, along the old shores of the Oolite.

But while the framework of the scenery must have been thus the same in both eras, and the same incalculably ancient sea must have broken in both against the same old fossil-bearing rocks, how entirely different must not the vital scenery of the two periods have been! Where we now see microscopic *Lepralia* and dwarfish *Sertularia*, huge *Isastrea*, embroidered by their flower-like polypes, and wide-spreading sheets of *Thamnastrea*, similarly mottled, must have gleamed white through the green depths of the water, as their existing representatives may be seen gleaming from the quiet recesses of tropical lagoons in the present day; the ammonite and belemnite must have careered over and around them amid the sheen of ganoidal scales; and, where the seal now disports, the plesio-