Oolite, which may be found on the shore beneath Dunrobin, alternating with shale-beds of the period of the Oxford clay. I succeeded in finding in it, on one occasion, a shell in the same state of keeping in which shells are so often found in the resembling rocks of Sutherland, but the species unluckily could not be distinguished. A common microscope at once detects the mechanical character of the mass; and I have learned that Dr. Fleming, after reducing a portion of it, sent him as an igneous rock, to its original sand, simply by submerging it in acid, expressed some little fear lest the sender should not have been quite 'up to trap.'

The explanation of the phenomenon seems rather difficult. There are instances in which what had once been trap-dikes are found existing as mere empty fissures; and other instances in which empty fissures have been filled up by aqueous deposition from above. An instance of the one kind is adduced, as the reader may perhaps remember, in the *Elements* of Lyell, from M'Culloch's *Western Islands;* two contiguous dikes traversing sandstone in Skye are found existing to a considerable depth as mere hollow fissures. An instance of the other kind may be found, says M'Culloch, in a trap rock in Mull, which is traversed by a dike that, among its other miscellaneous contents, encloses the trunk of a tree, converted into brown lignite. In cases of the first kind, the original dike, composed of a substance less suited to resist the action of the weather than the containing rock, has mouldered away, and left the vent from which it issued a mere hollow mould, in which the semblance of a dike might be *cast*, just as the decay and disappearance of the real crystal is supposed to have furnished a mould for the formation of the sandstone one. In cases of the second kind, we see the fictitious dike actually existing: it is the sandstone crystal moulded and consolidated, and, in short, ready for the museum. And we have but to sup-