

hundred and sixty feet over the upper stratum of the conglomerate, I found what I sought, — a well-marked bone, — in all probability the oldest vertebrate remain yet discovered in Orkney. What, asks the reader, was the character of this ancient organism of the Palæozoic basin?

As shown by its cancellated texture, palpable to the naked eye, and still more unequivocally by the irregular complexity of fabric which it exhibits under the microscope, — by its speck-like life-points or canaliculi, that remind one of air-bubbles in ice, — its branching channels, like minute veins, through which the blood must once have flown, — and its general groundwork of irregular lines of corpuscular fibre, that wind through the whole like currents in a river studded with islands, — it was as truly osseous in its composition as the solid bones of any of the reptiles of the Secondary, or the quadrupeds of the Tertiary periods. And in form it closely resembled a large roofing-nail. With this bone our more practised palæontologists are but little acquainted, for no remains of the animal to which it belonged have yet been discovered in Britain to the south of the Grampians,* nor, except in the Old Red Sandstone of Russia, has it been detected

* Since the above sentence was written and set in type, I have learned that my ingenious friend, Mr. Charles Peach of the Customs, Fowey, so well known for his palæontological discoveries, has just found in the Devonian system of Cornwall, fragments of what seem to be dermal plates of *Asterolepis*. It is a somewhat curious circumstance, that the two farthest removed extremities of Great Britain — Cornwall and Caithness — should be tipped by fossiliferous deposits of the same ancient system, and that organisms which, when they lived, were contemporary, should be found embedded in the rocks which rise over the British Channel on the one extremity, and overhang the Pentland Frith on the other.