

years, can reckon up all the fish which he has caught as considerably under a score. The existence of this great division of the animal kingdom, like that of the earlier reptiles during the Carboniferous period, did not form a prominent characteristic of those ages of the earth's history in which they began to be.

The earliest discovered vertebral remains of the system — those of the Upper Ludlow rock — were found in digging the foundations of a house at Ludford, on the confines of Shropshire, and submitted, in 1838, by Sir Roderick Murchison to Agassiz, through the late Dr. Malcolmson of Madras. I used at the time to correspond on geological subjects with Dr. Malcolmson, — an accomplished geologist and a good man, too early lost to science and his friends, — and still remember the interest which attached on this occasion to his communication bearing the Paris post-mark, from which I learned for the first time that there existed ichthyic fragments greatly older than even the ichthyolites of the Lower Old Red Sandstone, and which made me acquainted with Agassiz's earliest formed decision regarding them. Though existing in an exceedingly fragmentary condition, — for the materials of the thin dark-colored layer in which they had lain seemed as if they had been triturated in a mortar, — the ichthyologist succeeded in erecting them into six genera; though it may be very possible, — as some of these were formed for the reception of detached spines, and others for the reception of detached teeth, — that, as in the case of *Dipterus* and *Asterolepis*, the fragments of but a single genus may have been multiplied into two genera or more. And minute scale-like markings, which mingled with the general mass, and were at first regarded as the impressions of real scales, have been since recognized as of the same char