

was at that time, as Agassiz's Monograph of the Old Red fishes had not yet appeared, the only work specially devoted to the palæontology of the system, so largely developed in the neighborhood of Thurso. With perhaps a single exception, — for the Thurso rocks do not yet seem to have yielded a *Pterichthys*, — he succeeded in finding specimens, in a state of better or worse keeping, of all the various ichthyolites which I had described as peculiar to the Lower Old Red Sandstone. He found, however, what I had *not* described, — the remains of apparently a very gigantic ichthyolite; and, communicating with me through the medium of a common friend, he submitted to me, in the first instance, drawings of his new set of fossils; and ultimately, as I could arrive at no satisfactory conclusion from the drawings, he with great liberality made over to me the fossils themselves. Agassiz's Monograph was not yet published; nor had I an opportunity of examining, until about a twelvemonth after, the casts, in the British Museum, of the fossils of Professor Asmus. Besides, all the little information, derived from various sources, which I had acquired respecting the Russian *Chelonichthys*, — for such was its name at the time, — referred it to the cuirassed type, and served but to mislead. I was assured, for instance, that Professor Asmus regarded his set of remains as portions of the plates and paddles of a gigantic *Pterichthys*, of from twenty to thirty feet in length. And so, as I had recognized in the Thurso fossils the peculiarities of the *Holoptychian* (Coelacanth) family, I at first failed to identify them with the remains of the great Russian fish. All the larger bones sent me by Mr. Dick were, I found, cerebral; and the scales associated with these indicated, not a cuirass-protected, but a scale-covered body and exhibited, in their sculptured and broadly imbricated