

different from the five varieties of this ichthyolite which occur in the lower formation of the system, but generically the same. I very lately enjoyed the pleasure of examining the *bona fide* ichthyolite itself — one of the specimens of Dura Den, and apparently one of the more entire — in the collection of Professor Fleming. Its character as a *Pterichthys* I found very obvious; but neither the Professor nor myself was ingenious enough to discover in it any trace of the beetle of Dr. Anderson.*

Is it not interesting to find this very curious genus in both the lowest and highest fossiliferous beds of the system, and constituting, like the *Trilobite* genus of the Silurian group, its most characteristic organism?† The *Trilobite* has a wide geological range, extending from the upper Cambrian rocks to the upper Coal Measures. But though the range of the genus is wide, that of every individual species of which it consists is very limited. The *Trilobites* of the upper Coal Measures differ from those of the Mountain Limestone;

* This interesting ichthyolite has since been regarded by Agassiz as the representative of a distinct genus, to which he gives the name *Pamphractus*. As exhibited in his restoration, however, it seems to differ little, if at all, (if I may venture the suggestion,) from a *Pterichthys* viewed on the upper side. In Agassiz's beautiful restoration of *Pterichthys*, and his accompanying prints of the fossils illustrative of that genus, it is, with but one doubtful exception, the under side of the animal that is presented; and hence a striking difference apparent between his representations of the two genera, which would scarce obtain had the upper, not the under side of *Pterichthys* been exhibited. In verification of this remark, let the reader who has access to the *Monographic Poissons Fossiles* compare the restoration of *Pamphractus* (*Old Red*, Tab. VI., fig. 2) with the upper side of *Pterichthys*, as figured in this volume, Plate I., fig. 1, making, of course, the due allowance for a difference of species.

† See Note M.