

these again, with but one exception, from the *Trilobites* of the upper Silurian strata ; these yet again from the *Trilobites* of the underlying middle beds ; and these from the *Trilobites* that occur in the base of the system. Like the coins and medals of the antiquary, each represents its own limited period ; and the whole taken together yield a consecutive record. But while we find them merely scattered over the later formations in which they occur, and that very sparingly, in the Silurian System we find them congregated in such vast crowds, that their remains enter largely into the composition of many of the rocks which compose it. The *Trilobite* is the distinguishing organism of the group, marrying, if I may so express myself, its upper and lower beds, and what the *Trilobite* is to the Silurian formations, the *Pterichthys* seems to be to the formations of the Old Red Sandstone with this difference, that, so far as is yet known, it is restricted to this system alone, occurring in neither the Silurian System below, nor in the Coal Measures above.

I am but imperfectly acquainted with the localities in which the upper beds of the Old Red Sandstone underlie the lower beds of the Coal Measures, or where any gradation of character appears. The upper yellow sandstone belt is extensively developed in Moray, but it contains no trace of carbonaceous matter in even its higher strata, and no other remains than those of the *Holoptychius* and its contemporaries. The system in the north of Scotland differs as much from the carboniferous group in its upper as in its lower rocks ; and a similar difference has been remarked in Fife where the groups appear in contact a few miles to the west of St. Andrew's. In England, in repeated instances, the junction, as shown by Mr. Murchison, in singularly instructive sections, is well marked, the carboniferous limestones resting