

though in a state of very imperfect preservation, scales that differ from those of the *Holoptychius*, and from one another. One of these, figured and described by Professor Fleming in *Cheek's Edinburgh Journal*, bearing on its upper surface a mark like a St. Andrew's cross, surrounded by tubercled dottings, and closely resembling in external appearance some of the scales of the common sturgeon, "may be referred with some probability," says the Professor, "to an extinct species of the genus *Accipenser*.\*" The deposit, too, abounds

ently to the influences of an organic law, internal to each, but of the operation of some external cause, acting on the whole in one direction.

\* May I crave the attention of the reader to a brief statement of fact? I have said that Professor Fleming, when he minutely described the scales of the *Holoptychius*, hazarded no conjecture regarding the generic character of the creature to which they had belonged; he merely introduced them to the notice of the public as the scales of some "vertebrated animal, probably those of a fish." I now state that he described the scales of a contemporary ichthyolite as bearing, in external appearance, a "close resemblance to some of the scales of the common sturgeon." It has been asserted, that it was the scales of the *Holoptychius* which he thus described, "referring them to an extinct species of the genus *Accipenser*;" and the assertion has been extensively credited, and by some of our highest geological authorities. Agassiz himself, evidently in the belief that the professor had fallen into a palpable error, deems it necessary to prove that the *Holoptychius* could have borne "no relation to the *Accipenser* or sturgeon." Mr. Murchison, in his *Silurian System*, refers also to the supposed mistake. The person with whom the misunderstanding seems to have originated is the Rev. Dr. Anderson, of Newburgh. About a twelvemonth after the discovery of Professor Fleming in the sandstones of Drumdryan, a similar discovery was made in the sandstones of Clashbennie by a geologist of Perth, who, on submitting his new found scales to Dr. Anderson concluded, with the Doctor, that they