

*tychius*. The large scales and plates, and the huge teeth, belong to this genus. It was first introduced to the notice of geologists in a paper read before the Wernerian Society in May, 1830, by Professor Fleming, and published by him in the February of the following year, in *Cheek's Edinburgh Journal*. Only detached scales and the fragment of a tooth had as yet been found; and these he minutely described as such, without venturing to hazard a conjecture regarding the character or family of the animal to which they had belonged. They were submitted some years after to Agassiz, by whom they were referred, though not without considerable hesitation, to the genus *Gyrolepis*; and the doubts of both naturalists serve to show how very uncertain a guide mere analogy proves to even men of the first order, when brought to bear on organisms of so strange a type as the ichthyolites of the Old Red Sandstone. At this stage, however, an almost entire specimen of the creature was discovered in the sandstones of C'ashbennie, by the Rev. James Noble, of St. Madoes, a gentleman who, by devoting his leisure hours to Geology, has extended the knowledge of this upper formation, and whose name has been attached by Agassiz to its characteristic fossil, now designated the *Holoptychius nobilissimus*. His specimen at once decided that the creature had been no *Gyrolepis*, but the representative of a new genus not less strangely organized, and quite as unlike the existences of the present times as any existence of all the past. So marked are the

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amount of negative evidence may be dissipated by a single positive fact, and to inculcate on the geologist the necessity of cautious induction. An individual *Holoptychius* of Thurso must have been at least thrice the size of the *Holoptychius* of the Upper Old Red formation, as exhibited in the specimen of Mr. Noble, of St. Madoes.