

greatest of the three ; and there seems to be zoölogical as well as lithological evidence that its formation must have occupied no brief period. *The same genera occur in its upper as in its lower beds, but the species appear to be different.* I shall briefly state the evidence of this very curious fact.

The seat of Sir William Gordon Cumming, of Altyre, is in the neighborhood of one of the Morayshire deposits discovered by Mr. Malcolmson ; and for the greater part of the last two years Lady Gordon Cumming has been engaged in making a collection of its peculiar fossils, which already fills an entire apartment. The object of her Ladyship was the illustration of the Geology of the district, and all she sought in it on her own behalf was congenial employment for a singularly elegant and comprehensive mind. But her labors have rendered her a benefactor to science. Her collection was visited, shortly after the late meeting of the British Association in Glasgow, by Agassiz and Dr. Buckland ; and great was the surprise and delight of the philosophers to find that the whole was new to Geology. All the species, amounting to eleven, and at least one of the genera, that of the *Glyptolepis*, were different from any Agassiz had ever seen or described before. The deposit so successfully explored by her Ladyship occurs high in the lower formation. Agassiz, shortly after, in comparing the collection of Dr. Traill (a collection formed at Orkney) with that of the writer, (a collection made at Cromarty,) was struck by the specific identity of the specimens. In the instances in which the genera agreed, he found that the species agreed also, though the ichthyolites of both differed specifically from the ichthyolites of Caithness, which occur chiefly in the upper beds of the formation, and from those also of Lady Cumming of Altyre, which occur, as I have said, at the top. And in examining into the cause, it was