

passes York on the east, and crosses the Humber a little eastward of the junction of the Trent and Ouse, stretching on-

it is in general much decomposed; the unweathered parts are besprinkled with specks of mica, and resemble the Die-earth of Shropshire; it is however evidently a member of the lias formation. (G. Notes.)

At Clay hill and Long steep hill, at the foot of Greenhow hill, which is composed entirely of lias, this substance appears in a very different character from that which it commonly assumes. It is true that it is occasionally limestone and occasionally shale, in both of which states it contains pectines, belemnites, &c. although neither ammonites nor nautili were perceived; but it is more commonly in the state of a thick irregular argillaceous flag-stone, like the dun-stone of Hereford, and this, becoming more sandy in the upper beds, at length assumes the aspect of Coleyweston slate, but the fossils are the same as those of the lias. (G. Notes.) Indeed all the most characteristic organic remains are found as abundantly in Yorkshire as in Dorsetshire, and the identity of the formation completely established by them; we may notice particularly, with this view, the remains of the Ichtyosaurus and Plesiosaurus. The several species of the Ammonites belonging to the division, which have the siphuncle in an elevated ridge placed between two furrows traced along the back of each volution; the Ammonites armatus; the Gryphœa incurva: and the Plagiostoma gigantea.

Mr. Winch also gives the following list. (G. T. v. 5. p. 555.)

<i>Echinus vulgaris.</i>	Parkinson, vol. iii. tab. 2. fig. 3.
<i>Ammonites serratus.</i>	Sowerby, tab. 24.
armatus.....	65.
heterophillus .....	166.
<i>Nautilus</i> ..lineatus .....	41.
imperialis .....	1.
discus .....	12.
<i>Modiola</i> ..depressa.....	8. middle fig.
<i>Orthocera conica</i> .....	6. fig. 1 & 2.
<i>Belemnite.</i>	
<i>Mya</i> two species.	
<i>Chama digitata.</i>	Sowerby, tab. 174.
<i>Helix.</i>	
<i>Trigonia.</i>	
<i>Pentacrinite.</i>	
<i>Pectenite</i> resembling the common scallop.	

These are all mineralised by clay-iron-stone, iron pyrites, and calcareous spar.

Gigantic reeds resembling arundo donax are found in the sea cliffs opposite High Whitby. They appear to have been rooted in a bed of shale or slate-clay, and their remains protrude into a stratum of sand-stone five feet thick. Those which stand erect retain their shape, but those which do not are compressed. Their tops seem to have been broken off; the woody matter has disappeared, leaving sand-stone casts. Casts of Euphorbia are also found in the sand-stone strata above the alum rocks. Wood mineralised by iron is frequently found at Kettlewell and Stowbrow. Trunks and branches of fossil trees, the bark and softer parts of which have been changed into jet, are frequently met with in the alum shale; and leaves and impressions like those of the palm, are found in the sand stone and iron-stone. (G. T. vol. 5. p. 556.)