and in a subsequent part of this section (under the head range and extent) some additional details concerning the characters assumed by it in its course through Yorkshire, will be found in the notes.

(*b*) *Mineral contents.* The lias is nearly destitute of metallic or earthy minerals. It does not appear commonly to contain any metallic substance except iron; which, though it occurs in layers under the form of clay-iron-stone, or disseminated through the mass in the form of pyrites, never constitutes a mineral vein. It is said, but I know not with what truth, that small pieces of galena have been found in the quarries near Bath, and galena and blende are said to occur also near Whitby. Sulphate of barytes has been found in small quantity by Mr. Gilding, jun. in the canal near Gloucester, and I have a specimen of it in wood from Lyme in Dorsetshire. Sulphate of strontian is also said to be found at Watchet. Though chert is abundant in the limestone above and below it, siliceous matter is so rare in this formation, that I never met with it except at Aberthaw and Dunraven in South Wales, where its fossil, the gryphus, is coated with chalcedony; but chert occurs in the lias of Watchet, and the lias contains veins of chert also near Cowbridge in South Wales. (G. Notes.)

The iron pyrites, which is very abundant, by its decomposition and action on the argillaceous strata, produces an efflorescence of the aluminous sulphate so extensively worked at Whitby: to the same cause must be ascribed the spontaneous inflammation often observed in the cliffs near Charmouth, Dorsetshire. (See Maton's West. Counties, p 76. v. 1.)

(*c*) *Organic remains.* The organic remains contained in the lias are peculiarly interesting, as affording a greater number of animals of an higher order (that is to say of the vertebra class) than are exhibited in the list of any other formation if we except the Stonesfield beds of calcareous-slate in th great oolitic series before described.

In this class we have first to notice the remains of two very remarkable extinct genera of oviparous quadrupeds, evidently belonging to the same class with the great natural order *Lacerta*, but yet differing very essentially in structure from all the genera at present known to exist, and in such particulars as evidently must have fitted them to live entirely in the sea. They appear therefore to hold the same place with regard to

At Thickerby seven miles east of Gainsborough, Mr. Hornby of the latter place, sunk for coal in a black hard slaty or shaly substance.

In the lordship of Thrussington in Leicestershire, seven miles west of Sexhill, coal has been tried for at a place called Coal-pit Lees, and £400 expended, but in vain.