tion, and would create much confusion, by disturbing a nomenclature long received and originally established on well-defined paleontological data.

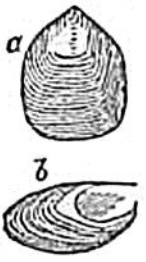
In Shropshire, the classical region, where the type of the Silurian group was first made out by Murchison, the formations subjacent to the Llandeilo consisted of quartzose rocks, sterile of fossils, or yielding little more than some obscure fucoids. In North Wales, Professor Sedgwick found below the Bala Limestone, long since recognized as the equivalent of the Llandeilo flags, a vast thickness of sedimentary and volcanic rocks, the lithological characters and physical features of which he studied assiduously for years, dividing them into well-marked formations, to which he affixed names. Collectively they constituted the chief part of the rocks called by him "Cambrian." They were devoid of limestone; but in a group of micaceous sandstones Mr. E. Davis discovered in 1846 the *Lingula* named after him, and from which the name of "Lingula flags" has since been derived. In these flags, about 1500 or 2000 feet in thickness, several other fossils were afterwards found, of different species from those in the Llandeilo beds. Amongst them, trilobites, *Agnostus* and *Conocephalus* (for genus, see fig. 614), and some rare Brachiopoda and Bryozoa, still unpublished by our Government surveyors, have been detected, and in the inferior black slates of North Wales a trilobite called *Paradoxides* (for genus, see fig. 613), a form still more characteristic of this era, together with another of the genus *Olenus* (fig. 610), and a phyllopod crustacean (fig. 608).

*Fossils of the "Lingula Flags," or lowest Fossiliferous Rocks of Britain.*

Fig. 608.

*Hymenocaris vermicauda*, Salter.
A Phyllopod Crustacean.
½ nat. size.

Fig. 609.




*Lingula Davisii*, M'Coy.
*a*. ½ natural size.
*b*. Distorted by cleavage.

Fig. 610.

*Olenus micrurus*, Salter.
½ nat. size.

"Lingula Flags" of Dolgelly, and Ffestiniog; N. Wales.

I have before observed, that between the Bala Limestone and the Lingula Flags there is a thickness of 11,000 feet of strata, in which *Graptolites* and certain species of *Asaphus*, *Calymene*, and *Ogygia* occur. These may be referred at present to the Silurian series, but the exact limits between them and the Lingula Flags cannot yet be assigned.

We might have anticipated, as already remarked, p. 442, that, whenever a fossil Fauna was discovered in the Cambrian strata, it would be found to consist of distinct species, and even, to a large extent, of distinct genera; for, although geological periods are of very unequal value in regard to the lapse of time (see p. 103), and our lines of separation may