book in which is written the history of the antiquities of Great Britain—in fine, of the world.

In Shropshire and Wales three zones of Silurian life have been established. In rocks of three different ages *Graptolites* have left the trace of their existence. Another fossil characteristic of these ancient

rocks is the *Lingula*. This shell is horny or slightly calcareous, which has probably been one cause of its preservation. The family to which the Lingula belongs is so abundant in the rocks of the Welsh mountains, that Sir R. Murchison has used it to designate a geological era. These Lingula-flags mark the beginning of the first Silurian strata.

In the Lower Llandovery beds, which mark the close of the period, other fossils present themselves, thus greatly augmenting the forms of life in the Lower Silurian rocks. These are cœlenterata, articulata, and mollusca. They mark, however, only a very ephemeral passage over the globe, and soon disappear altogether.

The vertebrated animals are only represented by rare Fishes, and it is only on reaching the Upper Ludlow rocks, and specially in those beds which pass upward into the Old Red Sandstone, that the remains have been found of fishes—the most ancient beings of their class.

The class of Crustaceans, of which the lobster, shrimp, and the crab of our days are the representatives, was that which predominated in this epoch of animal life. Their forms were most singular, and different from those of all existing Crustaceans. They consisted mainly of the *Trilobites*, a family which became entirely

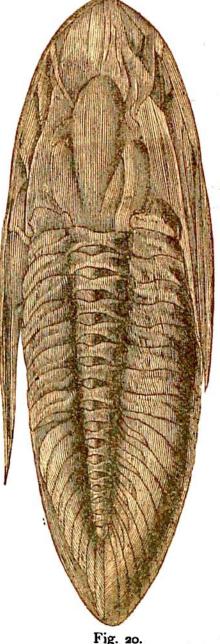


Fig. 20. Ogygia Guettardi. Natural size.

extinct at the close of the Carboniferous epoch, but in whose nicelyjointed shell the armourer of the middle ages might have found all his contrivances anticipated, with not a few besides which he has failed to discover. The head presents, in general, the form of an oval buckler; the body is composed of a series of articulations, or