

7. **ATURIDÆ**:—Aperture open. Septa lobed. Siphuncle internal or nearly so, and very large. *Aturia* (*Megasiphonia*)—a Tertiary form.

8. **GONIATIDÆ**:—Aperture open. Septa with angular lobes. Siphuncle external. *Goniatites* (*Aganides*;) *Bactrites*.

9. **CERATIDÆ**:—Aperture open. Septa with denticulated lobes. Siphuncle external. *Ceratites*; *Baculina*.

10. **AMMONITIDÆ**:—Aperture open. Septa foliated. Siphuncle external *Ammonites*; *Crioceras*; *Scaphites*; *Ancyloceras*; *Toxoceras*? *Hamites*; *Ptyloceras*; *Baculites*; *Turrilites*; *Hellicoceras*; *Heteroceras*.

Under the name of **HETEROSIPHONIDÆ**, we have separated from the **NAUTILIDÆ**, all of those more or less imperfectly known forms (commonly classed with *Orthoceras*) which possess a large complicated siphon, or in which with other related characters, the siphon is marginal. We are fully aware that many objections may be urged against this view, but until a true nautilus be discovered with the peculiar character of siphuncle exhibited by *Ormoceras* for example, we feel justified in holding to the separation of this latter form, with *Endoceras*, &c., from the normal *Orthoceratites*. The external ridges on the siphuncle of *Endoceras*, although so distinctly pointed out by Hall, appear to be forgotten altogether in the descriptions of many European palæontologists. *Ormoceras*, notwithstanding the central position of its siphuncle, is evidently closely related to *Gonioceras*; and through that genus, though less closely, to *Endoceras*.

If the separation of the *Goniatites* and *Ceratites* from the **AMMONITIDÆ** be disapproved of, they may be placed in that family as separate tribes. Our present object, however, is not to discuss the classification of the chambered cephalopods, but to point out the occurrence in our Silurian rocks of a type hitherto unannounced below the Devonian formation.

In the fifth of the above families, that of the **CYRTOCERATIDÆ**, characterised by the presence of simple septa with external or so-called "dorsal" siphuncle, we have three genera: *Cyrtoceras*, a simply "horned" form, exceedingly abundant; *Gyroceras*, a discoidal or "rolled-up" cyrtoceras, but without contiguous volutions; and *Cryptoceras*, likewise a discoidal form, but with contiguous whorls. Of the last named genus, founded by D'ORBIGNY, but two species appear to have been hitherto recognised: the *C. subtuberculatus* (*Nautilus subtuberculatus*) from the Devonian beds of Nassau; and the *C. dorsalis* (*Nautilus dorsalis* Phil.) from the carboniferous