

noticing about a dozen others from the coal formation, which are included in the following general summary :—

| | | | |
|-----------------------|--------------------------|---|-----|
| Mollusca — Conchifera | plagimyona | - | 40 |
| | mesomyona | - | 28 |
| | brachiopoda | - | 100 |
| | Gasteropoda | - | 92 |
| | Cephalopoda monothalamia | - | 10 |
| | polythalamia | - | 69 |
| | | | 339 |

Of these, only about 10 can by any means be considered as of freshwater, or even estuary origin : and these all belong to the coal formation (unio, anodon, &c.). Many of the genera are the same as those now existing (*e. g.* *nucula*, *lingula*, *isocardia*); but others are quite different, (as, *pleurorhynchus*, *producta*, *euomphalus*, *goniatites*, &c.) and seem to belong to another order of creation. About 60 per cent. of the species belong to extinct genera; and it is very remarkable, that brachiopodous bivalves, which, in existing nature, are perhaps to other shells as 10 in 1000, were in these ancient periods as 10 in 34. The *goniatites* are most

EXPLANATION OF FIGURES, p. 163.

1. *Producta scabriculus*. *Sowerby*. It occurs in mountain limestone generally, and in coal strata at Coalbrook Dale.
2. *Producta punctata*. *Sowerby*. Common in the carboniferous limestone.
3. *Terebratula pleurodon*. *Phillips*. Common in the carboniferous limestone.
4. *Spirifera cuspidata*. *Sowerby*. Not rare in the carboniferous limestone.
5. *Pleurorhynchus minax*. *Phillips*. From the carboniferous limestone of Ireland, Yorkshire, Derbyshire.
6. *Inoceramus vetustus*. *Sowerby*. From the limestones and shales of the north of England, the north of Ireland, &c.
7. *Goniatites sphericus*. *Sowerby*. A common shell in the limestone.
8. *Bellerophon tangentialis*. *Phillips*. From the limestone of Ireland, Yorkshire, &c.
9. *Orthoceras cinctum*. *Sowerby*. From the limestone of Ireland, north of England.
10. *Melania constricta*. *Sowerby*. From the limestone of Derbyshire, Yorkshire, &c.
11. *Pleurotomaria flammigera*. *Phillips*. From the limestone of Bolland.
12. *Natica plicistria*. *Phillips*. From Bolland in Yorkshire, Ireland, &c.
13. *Euomphalus pentagonalis*. *Sowerby*. Common in the limestone of Ireland, north of England, &c. Its internal cavity is divided into chambers by imperforate septa, as was first noticed by Mr. W. Gilbertson of Preston.