

|                   |  |
|-------------------|--|
| Heteropoda .....  | 10   |
| Cephalopoda ..... | 69   |
| Trilobites.....   | 8  |
| Annulosa .....    | 6  |
| Fishes .....      | A few, especially of<br>the genera <i>Megalichthys</i> and <i>Holoptychius</i> . |

Freshwater life is probably indicated, rather than fully illustrated, by several of the fishes, as *Megalichthys*—the *Unionidæ*—and certain tribes of fossil plants, as *Equisetacæ*?, *Hydaticæ*, &c., and insects; but of these latter forms we have none yet recorded from Yorkshire.

Terrestrial life is abundantly marked, but only by plants. Of these we have a large catalogue, including the following groups, among which Ferns, *Lepidodendra*, and *Sigillariæ* are predominant.

|                          |                          |
|--------------------------|--------------------------|
| Asterophyllites.         | F. <i>Pecopteris</i> .   |
| F. <i>Alethopteris</i> . | <i>Pinites</i> .         |
| <i>Calamites</i> .       | <i>Sagenaria</i> .       |
| F. <i>Cyclopteris</i> .  | <i>Sigillaria</i> .      |
| <i>Halonia</i> .         | F. <i>Sphenopteris</i> . |
| <i>Lepidodendron</i> .   | <i>Ulodendron</i> .      |
| F. <i>Neuropteris</i> .  |                          |

Of fruits the most remarkable are *Trigonocarpon* and *Cardiocarpon*. The prefix F. marks genera of Ferns.

PALÆONISCIAN PERIOD.—Thus, toward the close of the Palæozoic creations, we have in this region unequivocal disclosure of broad surfaces of the old sea-bed in a state fitted for abundant vegetation; this is followed by an epoch of great and extensive disturbance, resulting in the production of a mass of land, on the east of which is a very extensive sea. And again, we perceive the singular effect of watery violence,—extensive wearing and partial levelling of the surface of the uplifted coal-measures and older strata, before the next class of deposits was produced. This fact is evident in the range of country northward from Aberford, as far as the Tees; but, from the unequal hardness of the materials, the surface is far less uniform than in the admirable example of the Palæozoic series. In this sea new