

In describing this series, we shall confine ourselves principally to the British Islands, it being far too extensive a subject to be treated generally.

The following are the chief *local* subdivisions occurring in the Carboniferous rocks, and illustrate the general distribution through England and Wales:—

TABLE XXVI.—*Subdivisions of Carboniferous Rocks.*

## 1. Northumberland and Durham.

Coal Measures (1500 to 2000 feet).	Upper coal measures with <i>thin</i> coals.
Millstone grit (400 feet.)	Middle coal measures with <i>thick</i> coals.
Yoredale rocks and Carboniferous limestone series ( <i>Bernician</i> ). <sup>2</sup>	Lower coal measures or Gannister beds <sup>1</sup> with <i>thin</i> coals. Alternations of grit and shale.
Tuedian beds.	Alternations of limestone, coal, shale, grit, and sandstone.
	White or pale brown and grey sandstones and greenish grey shales, cement stones and impure limestones.

## 2. Lancashire, Yorkshire, and Derbyshire.

Coal measures (2000 to 7000 feet).	Upper coal measures with thin limestones and coals. Sandstones.
Millstone grit (300 to 3000 feet). Yorkshire and Derbyshire.	Middle coal measures with <i>thick</i> coals. Lower coal measures or Gannister beds <sup>1</sup> with <i>thin</i> coals. Rough rocks (first grit)..... 50 to 60 feet. Shales.....
Yoredale rocks (300 to 2000 feet).	Haslington flags (second grit)..... 60 to 100 ,, Shales..... 75 to 150 ,, Middle grits and shales (third grit)..... 100 to 175 ,, Shales and sandstones..... 300 to 500 ,, Kinder Scout grit (fourth grit)..... 500 to 700 ,,
Carboniferous limestone (400 to 1200 feet).	Shales. Yoredale grit. Shale, with hard thinly-bedded Yoredale sandstones in places. Black shales with thin earthy impure limestones.

## 3. South-West of England and South Wales.

Coal measures (5000 to 12,000 feet).	Upper coal measures.
(300 to 1000 feet).	Pennant grit.
(1000 to 3000 feet).	Lower coal measures.
(300 to 500 feet).	Millstone grit or " <i>Farewell Rock</i> ."
	Upper limestone shale.
	Carboniferous limestone.
	Lower limestone shale.

<sup>1</sup> *Gannister* or *Calliard*, a term used to designate a hard siliceous bed, constituting the floor of some of the Durham and Yorkshire coal-seams.

<sup>2</sup> *Bernician*, a name suggested by Mr. G. A. Lebour, from the circumstance that no Yoredale rocks proper and no scar limestone proper are known to occur in these beds. (*See further*, p. 248.)