

## CHAPTER XXXV.

INDUSTRIAL PRODUCTS OF THE GEOLOGICAL FORMATIONS—  
 ORIGIN OF LODES—QUANTITIES OF AVAILABLE COAL  
 IN THE COALFIELDS—ORIGIN OF THEIR BASIN-SHAPED  
 FORMS—CONCEALED COAL-FIELDS BENEATH PERMIAN,  
 NEW RED, AND OTHER STRATA—SUMMARY.

To enter into detail upon the peculiar effect of geology on the industry of the various races or the populations of different districts, would lead me far beyond the proposed scope of this work. I shall, therefore, only give a mere outline rather than attempt to exhaust the subject.

First, let us turn to the older rocks. In Wales, as I have already stated, these consist to a great extent of slaty material. The largest slate quarries in the world lie in the Cambrian rocks of Caernarvonshire. One single quarry, that of Penrhyn in Nant Ffrancon, is half a mile in length, and more than a quarter of a mile from side to side. Other quarries of equal importance collectively occur in the Pass of Llanberis, and there are large quarries in the same strata at Nant-y-llef, but none of these are of the same vast size. Important quarries also lie in the Lower Silurian rocks near Ffestiniog in Merionethshire, and there are large slate quarries in the Wenlock shale, near Llangollen, and others of minor note scattered about Wales, but always in Cambrian or Silurian rocks.