

## CHAPTER VI.

### *Comparative view of the distribution of the great Coal-formation in other countries.*

Having in the preceding chapter concluded our examination of the English coal-districts, we may usefully close the present book with a rapid survey of the distribution of this important mineral in other countries.

To begin with Scotland, as most nearly connected with our proper field of enquiry, we find in Dumfriesshire (where the great central Penine chain of Northern England joins, almost at right angles, the great southern transition chain of Scotland) many limited coal-fields reposing against, or forming narrow basins in, the vallies of the latter chain; these are associated with, and rest upon as usual, thick beds of the carboniferous limestone. (See Jameson's *Mineralogy of Dumfries*; and for an account of the limestone quarries, Sowerby's *Min. Conchology*, vol. 3.)

But the principal coal district of Scotland, occupies the tract forming what may be called the great central valley of Scotland (speaking relatively, for considered in itself its surface is very considerably varied), which lies between the great transition chain on the south, and the still loftier primitive ranges of the highlands on the north. The whole of this wide tract is occupied by the coal-measures, the carboniferous limestone, and the old red sandstone, associated in every possible manner with vast accumulations of every variety of trap. A good general description of this tract will be found in Bouet's '*Geologie de l'Ecosse*'; a memoir by Mr. Bald, in the third volume of the *Wernerian Transactions*, on the Clackmannan coal-field, though referring to one point only, furnishing the most precise information concerning the more detailed structure of the coal-measures; and many particulars, together with a good list of the organic remains found in the carboniferous limestone) which agree with those occurring in England) may be seen in the history of the parishes of Ruthenglen and Kilbride, near Glasgow. Williams's *Mineral history* (republished by Dr. Miller) furnishes some materials concerning the eastern part of this tract, but such as are rather interesting to the practical miner than the geologist.

In the low district on the east of Sutherland, where the secondary formations again intrude among the primitive high-