

EUROPE

COAL is found in commercial quantity in practically all the independent political divisions of Europe. In some the reserve is nearly exhausted, as in Switzerland; in others the large production is rapidly depleting the reserves; and in Europe as a whole, the duration of the coal supply, in view of the present output, is a matter for serious consideration.

The principal anthracite fields are the Donetz basin in Russia and the Welsh fields of Great Britain. The largest reserves of bituminous coal are in the Belgian-German basins, although the British fields may be more easily exploited and a larger percentage of the reserves extracted. Germany and Austria have about equal amounts of the less altered varieties of coal which constitute a large part of their present output.

Coal occurs in many of the post-Devonian deposits but the principal reserve is found in the Upper Carboniferous, although Lower Carboniferous and Tertiary beds contain valuable coal-seams.

PALÆOZOIC COALS

The coal deposits of greatest age are those reported in the Upper Devonian of Buren island, north of Norway and the Shungite beds of northern Russia. Lower Carboniferous coals are found in Spitzbergen and, in Russia, in the Moscow and Donetz basins and the Urals. The coals of Scotland and the north coast of Ireland as well as those of small basins in the Armorican *massif* of France are also of Lower Carboniferous age.

The Coal-Measures proper, of Upper Carboniferous age, are the richest in coal.

In the Lower Coal-Measures in England and in the Namurian of France and Belgium a few thin seams are found. The principal Coal-Measures of Ireland and of the Valenciennes and Pas de Calais basins of France are of this age. Two seams of this age in the Bohemian coal-fields of Austria contains a large reserve, and it is probable that the lower measures of the Dombrova basin are of the same age.

The middle division (Westphalian) forms the principal productive measures of Great Britain, northern France and Brittany, Belgium and Germany and the concealed fields of the Netherlands. Other basins such as the coal-fields of Asturias and Leon in Spain and *Étage C₂* of the Donetz basin may be correlated with the Westphalian measures.

The Upper Coal-Measures (Stephanian) are coal-bearing in central and southern France, in Upper Silesia and the adjacent parts of Austria and Russia and in a small area in Portugal. Small areas grouped as Carboniferous include basins in Sardinia, Hungary, Servia and Bulgaria. Permian coal deposits are rare, but occur in Bohemia, Saxony and central France.

MESOZOIC COALS

Coal-seams occur at various horizons from Upper Triassic to Upper Cretaceous. The lower coal horizons lying between the Triassic and Jurassic are coal-bearing in northern Austria and southern Sweden and to a less degree