near Boulogne, and, passing under the chalk and green sand, continues in an easterly direction by Valenciennes, Mons, Charleroi, and Namur, to Liege and Eschweiler, near Aix-la-Chapelle. On the right bank of the Rhine, the coal tract near Elberfeld may be viewed as a prolongation of this great Belgian deposit.

Some traces of millstone grit, and more of aluminous shales, divide the coal from the limestone, in the valley of the Meuse, and also in Westphalia, at Lintdorf, and between Werden and Velbert. These representatives of the millstone grit group (flotzleerer) sandstein acquire, farther east, a great development about Arnsberg, Meschede, and Warstein. No old red sandstone is known in Westphalia, but red conglomerates represent it on the Meuse. The Saarbruck coal field contains thick red sandstones in its upper part, resembling the South Lancashire section. The same, on a greater scale, appears in Lower Silesia, and there, as in Lancashire, the true bunter sandstein covers unconformedly the coal. In Upper Silesia the coal without either limestone or old red sandstone rests on grauwacke. (Von Dechen.) The coal of Saxony, about Zwickau and Dresden, rests on igneous rocks.

At Litry near Bayeux, and between Angers and Nantes, coal occurs under relations to the older rocks, which appear like those of the Devonshire culm. "In the centre and south of France are some limited coal deposits, lying in the valleys of the Loire, the Allier, the Creuse, and the Dordogne, the Aveyron, and the Ardêche, between ridges proceeding from the primary central group connected with the Cevennes." (These coal fields are devoid of mountain limestone.) Coal is mentioned as occurring in eight places in Catalonia, in three in Aragon, and one in New Castile. (Mr. Conybeare, in "Geology of England and Wales.")

In Russia (provinces of Tula and Kalouga), in Syria, in the basin of the Indus, at Batavia, and in China, in Van Diemen's Land and New South Wales, in Virginia, and at several points west of the Alleghany Mountains, are extensive coal fields.

172