

coal appears to range many miles on the south-west and south of Hanover between Osnabruck and Hildesheim, but we cannot refer to any description of it; it may probably form the prolongation of the northern line of coal-fields which we lately traced as far as the Ruhr.

On the north-east and south-east of the Hartz mountains, near Ballenstadt and Neustadt, coal-measures repose on the transition rocks of that group; they are covered by porphyry associated with the *rothe todte liegende*, to which succeed the cupriferous marle-slate, &c. corresponding with the newer red sandstone and magnesian limestone of England. Coal-measures occur beneath the porphyries of the environs of Halle under similar circumstances. An account of these districts may be found in Freisleben's "*Kupfer schiefer gebirges.*"

In Saxony, coal-measures are found in many places skirting the northern base of the *Erzegebirge* mountains. There are extensive mines at Schonfeld near Zwickau, and at Planenschen grund near Dresden. At Schonfeld the coal alternates with porphyry, above which occur the following beds. 1. A conglomerate of porphyry and gneiss. 2. Bituminous shale with vegetable impressions. 3. Red sand. At Zwickau the beds (beginning with the lowest) 1. Wacke. 2. Basalt. 3. Nine or ten coal-beds alternating with white grit and shale containing vegetable impressions. 4. Sandstone. 5. Red grit. The coal-field of Planenschen grund is more extensive than either of the former; here a range of sienite, extending on the right bank of the Weisseritz, forms the fundamental rock on which a secondary porphyry reposes; then succeed four beds of coal alternating with grit and shale, and inclined at an angle of 65°.

There is no bitumen in the coal of Schonfeld; although it abounds at Plauenischen grund: the same fossil vegetation is presented in all these mines. (See Sternberg '*Flora zur Vorwelt.*')

We are not able to refer to any particular account of the prolongation of the coal-measures on the northern side of the great primitive chain which traverses central Europe, proceeding westwards from the *Erzegebirge* under the names of the *Riesengebirge* and *Carpathian mountains*. Count Sternberg, however, is of opinion that such a continuation may be traced, extending through Poland into Moldavia and Wallachia.

On the south of the *Erzegebirge* and *Riesengebirge* the basin of Bohemia, extending along the course of the Beraun and Iser, and including the adjoining parts of Upper Silesia between Landshut and Silberberg, presents a very extensive coal-district.

This may generally be described as lying between the great primitive chain above-mentioned on the north, and the great district of primitive slate which occupies the larger part of Bohemia south of the Beraun and upper Elbe; but on its north-