"further extension overlies also the latter formation. " melaphyre-amygdaloid of Planitz, near Zwickau in Saxony, " forms also a covering regularly inserted into the Rothliegende, "above its inferior strata. On the western declivity of the "Oberhohndorfer Hill, near Zwickau, the melaphyre which here " contains numerous green-earth and calcspar amygdules, shews an " interesting intercalation with the brownish-red slate-clays of the " Rothliegende, irregular lumps and patches of which being as it " were kneaded into the mass of the melaphyre. The melaphyric " rock of the Johann-Friedrich and Zabenstadter Adit, in Mansfeld, " is evenly interstratified in the Rothliegende. G. Leonhard "mentions that in the Rothliegende of the neighbourhood of "Darmstadt, at Gætzenhain and Urberach, the melaphyre forms "distinct outbursts of considerable size in the form of domes " (Kuppen,) which consist in the centre of solid melaphyre, and "towards the periphery of amygdaloidal rocks, and shews in " places both flagstone-like and columnar separation. In Silesia "the melaphyres appear in two places: in the country between "Læwenberg and Læhn, where they, according to the investi-"gations of Beyrich, occur in several courses, striking from "north-west to south-east, intersecting the Rothliegende, and "in still more extended measure at the edge of the great " bay opening towards south-east in the Grauwacke at Landeshut, "in which the carboniferous formation and the Rothliegende "have been deposited, and in which they form, according to Zobel " and Von Carnal, a range extending from Schatzlar to Neurode. "In north-eastern Bohemia, according to Emil Porth, and "Jokély, malaphyres are found as numerous, and sometimes very "thick layers, in the Rothliegende. Jokély describes, in the " district of Jicin, five beds of melaphyre in various parts of the "Rothliegende, which exhibit very distinctly observable strati-"graphical relations. They prove to be, for the most part, true " melaphyre streams, which have flown like lavas, and in visible " connection with undoubted vein-like outbursts. According to " Porth, the neighbourhood of the melaphyre veins is frequently, "for great distances round, a field of melaphyric ash and " scoriæ."\*

From these quotations it is plain that, in Europe, melaphyres only made their appearance during the Carboniferous and Permian

<sup>\*</sup> Zirkel; Petrographie. Vol. ii., p. 71.