## 452 Early maps in Germany and France

Graftschaft Henneberg, Chursächsischen Antheils. Three years later a more important map, also in colour, was issued at Leipzig in 1778 by J. F. W. Charpentier, Professor in the Mining Academy of Freiberg, to accompany his excellent quarto monograph on the Mineralogische Geographie der Chursächsischen Lände. Eight tints are used to discriminate granite, gneiss, schist, limestone, gypsum, sandstone, river-sand, clay and loam; and there are also symbols to point out the localities for basalt, serpentine, etc.

Palassou, in his Essai sur la Minéralogie des Monts Pyrénées, Paris, 1781, gave a series of maps with engraved lines and signs, and also a route-map of the part of France between Paris and the Mediterranean, with the general mineralogical characters of each line of route indicated by strips of colour. He thus distinguished by a green line the granite rocks, by a yellow line the "schists," and by a red line the calcareous rocks. He also indicated the presence of these various formations by different symbols, among which was one for extinct volcanoes, that figures in the Clermont region and also to the west of Montpellier.

William Smith's map, the history of which has been referred to in Chapter XII. appeared in the year 1815 with the following title—"A Geological Map of England and Wales, with Part of Scotland; exhibiting the Collieries, Mines, and Canals, the Marshes and Fen Lands originally overflowed by the Sea; and the Varieties of Soil, according to the Variations of the Substrata; illustrated by the most descriptive Names of Places, and of Local Districts; showing also the Rivers, Sites of Parks, and Principal Seats of