to do, at my leisure in my study,-but it is a real scheme, taken upon the spot with patience and diligence, by frequent or rather continual observations, in the course of my journeys of business through almost every the minutest parcel of the country: digested at home with much consideration, and composed with as much accuracy as the observer was capable of." The Chart, which he indignantly refused to call a map, is on the scale of rather more than an inch and a half to a mile, and comprises the country around Canterbury. It shows the positions of the valleys and distinguishes the hills by the nature of their component materials, such as chalk, "stonehills" (Lower Greensand) and "clay-hills," lying over the plain of the Weald. As many parts of the valley system are now dry, Packe inferred that they were not hollowed by streams, but by the retiring waters of the Deluge and have remained without change ever since.1

The mineralogical maps of Guettard have already been noticed (p. 110). The earliest of these was presented to the Academy of Sciences of Paris in 1746, and the series was continued by the same industrious observer until he handed over the further prosecution of the task to his successor Mounet. The early map of Füchsel (1762) has been referred to in Chapter VII. (p. 198). The first map in which the various geological formations were represented by washes of colour appears to have been one by G. Gläser published at Leipzig in the year 1775 in his Versuch einer mineralogischen Beschreibung der gefürsteten

¹ See a paper by Fitton in Phil. Mag. vol. i. (1832) p. 447.