For this delay various good reasons may be assigned. We have seen that William Smith's researches went down into the Coal-measures, but he had only a general and somewhat vague idea of the sequence of the rocks beneath that formation. In the table accompanying his map (1812) he placed below the Coal the Derbyshire Limestone followed by Red and Dunstone, Killas or Slate and lastly Granite, Syenite, and Gneiss. Some of these rocks were known to be fossiliferous, but in general, throughout Western Europe, they had been so disturbed and dislocated that they no longer presented the proofs of their sequence in the same orderly manner as had led to the recognition of the succession of the younger formations.

It will be remembered that in his original scheme of classification Werner grouped some rocks as Primitive (*uranfängliche*), and classed together as Floetz the whole series of stratified formations between these and the alluvial deposits. Further experience led him to separate an intermediate group between the Primitive and the Floetz, which he denominated Transition. He considered that this group was "deposited during the passage or transition of the earth from its chaotic to its habitable state."[1] He recognised that it contains the earliest organic remains, and believed it to include the oldest mechanical deposits. He subdivided the Transition rocks rather by mineral characters than by ascertained stratigraphical sequence. The hardened variety of sandstone called greywacke formed by far the most important member of the whole series, and

[1] Jameson's *Geognosy*, p. 145 (1808).