1805, Professor Jameson published his "Mineralogical Description of Dumfriesshire;" and to him must be assigned the merit of first determining that these ancient schists belong, not to the Primary, but to what Werner has termed the Transition or Grauwacke Series. He states in this work, that he had traced these Transition rocks in Scotland "from the northern extremity of the Pentland Hills, which is about six miles distant from the shores of the Frith of Forth, to Lang-robie, in Dumfriesshire, about three miles from the Solway Frith." We find him, too, giving very correctly the other limits of the system as developed in our southern counties, and classifying with much precision the mechanical and mineralogical peculiarities of the rocks which compose it. But when he comes to speak of its organisms, he is content to discuss the subjects in a single sentence, founded apparently, from its vague generality, less on his own observations in the field which he describes, than on the general conclusions of his master, Werner. After stating that "Transition or Grauwacke slates contain petrifactions," whereas "primitive clay slate" does not, he goes on to say that the "petrifactions found in transition rocks are of animals and plants of the lower orders, that probably no longer exist on the face of the earth." An anonymous critic, who in the succeeding year, 1806, reviewed his work in a London periodical (the "Literary Journal,") and who was evidently acquainted with the Grauwackes of Dumfriesshire, took up the subject, and regretted that the Professor had not been more specific. "Our author might have added," we find him saying, "that *vegetable* petrifactions are very common in the Grauwacke slates of Dumfriesshire. The omitting of this circumstance is rather unaccountable," it is added, "as he could not possibly have avoided making the observation. He has been very properly punished for the omission. The assertion that Grauwacke contains petri-