

form of Troughs or Basins have resulted from two distinct systems of operations, in the economy of the terraqueous globe ; the first producing sedimentary deposits, (derived from the materials of older rocks, and from chemical precipitates,) on those lower spaces into which the detritus of ancient elevated regions was transported by the force of water ; the second raising these strata from the sub-aqueous regions in which they were deposited, by forces analogous to those whose effect we occasionally witness, in the tremendous movements of land, that form one of the phenomena of modern Earthquakes.

have shewn us the links which connect the Carboniferous system with the older Slaty rocks. The large group of deposits to which he has given the appropriate name of *Silurian system*,) as they occupy much of the Territory of the ancient Silures,) admits of a four-fold division, which is expressed in the section Pl. 66. Fig. 1. This section represents the exact order of succession of these Strata in a district, which must henceforth be classic in the Annals of Geology.

In September, 1835, I found the three uppermost divisions of this system, largely developed in the same relative order of succession on the south frontier of the Ardennes, between the great Coal formation and the Grauwacke. See Proceedings of the Meeting of the Geological Society of France at Mézières and Namur, Sep. 1835, (*Bulletin de la Société Géologique de France, Tom. VII.*) The same subdivisions of the Silurian system, maintain their relative place and importance over, a large extent of the mountainous district of the Eifel, between the Ardennes and the Valley of the Rhine ; and are continued East of the Rhine through great part of the duchy of Nassau. (See Stiffts Gebirgs-Karte, von dem Herzogthum-Nassau, Wiesbaden, 1831.)