

cabinet, as a mass or individually, though in the field they are easily and accurately traceable, for limited ranges of country. Compared with the older systems, the argillaceous rocks, in general less indurated, less complicated by divisional planes, and only locally endowed with cleavage, retain their original lamination: the arenaceous rocks deviate from the character of grauwacke, toward ordinary sandstone and conglomerate; the calcareous rocks are not usually so crystalline as in gneiss, nor of so earthy a substance as many of the later secondary limestones, but have a concretionary sub-crystalline texture.

Examined in detail, however, considerable variations appear among the different members of the Silurian system: some of the argillaceous beds are black, others of a liver or grey colour: some arenaceous beds fine-grained, and argillaceous (Ludlow) were aptly named by Mr. Murchison "mudstone": others are like common hard gritstone (in the Caradoc): some appear to be principally composed of volcanic ashes, or the disintegrated particles of trap rocks, and are called "volcanic sandstones" (Malvern hills, the Caradoc, &c.). Some of the limestones (Llandeilo) resemble the flaggy beds of the slate system at Coniston and Bala: others (Aymestry, Wenlock) are purer, more concretionary, and more analogous to the calcareous rocks of the carboniferous system above.

*Structure.* — In general the accumulation of these rocks appears to have been regular and tranquil; the whole series of argillaceous and most of the arenaceous rocks are full of laminæ of deposition: beds are very distinct in the sandstones: the limestones are also regularly stratified, though nodular and uneven on their surfaces, and sometimes partially lenticular or included among shales, like other calcareous rocks supposed to have originated as coral reefs. According to what we have found to be a general law, that divisional planes abound and are regular in proportion to the regularity of the laminæ of deposition, the argillaceous beds