

of the characters and relations of this group of deposits.

1. THE COAL MEASURES.

(*The uppermost in the series.*)

Sandstone, shale, and numerous beds of coal; with layers of ironstone irregularly stratified, abounding in terrestrial plants.

Beds of limestone, with fresh-water shells.

Total thickness, 1000 yards.

2. THE CARBONIFEROUS, OR MOUNTAIN LIMESTONE.

Millstone grit, sandstone, shale, and coal, with plants.

Limestone and flagstone, abounding in crinoidea, with plants.

Lower, or scar-limestone, with zoophytes in profusion, crinoidea, productæ, spiriferæ, orthoceratites, ammonites, goniatites, bellerophon, trilobites, &c.

Total thickness, about 800 yards.

3. OLD RED SANDSTONE, OR MARL.

(DEVONIAN SYSTEM, of *Professor Sedgwick and Mr. Murchison*.)

Quartzose conglomerates, and silicious sandstones, without organic remains.

Flagstones, marls, and concretionary limestones, provincially termed *cornstone*; laminated reddish and green micaceous sandstones, called *tilestones*. Fishes, orthoceratites, nautili, and several genera of mollusca occur, but organic remains are comparatively rare.

Total thickness estimated at 3500 yards.

Such is a synoptical view of the strata usually comprehended in this series; but the recent obser-

* *Annals of Philosophy*, No. 89, p. 259.