

3. *Carboniferous, or Mountain Limestone.*

- a. Limestone and flagstone, abounding in crinoidea and marine shells; with layers and nodules of chert. Ores of lead, zinc, copper, barytes; fluor spar, &c.
- b. Limestone, with innumerable shells of the genera productus, spirifer, goniatites, orthocera, bellerophon, &c.
- c. Several varieties of black, bluish grey, and variegated marbles.

Obs.—The strata comprised in the carboniferous (*coal-bearing*) system, consist of sandstones more or less felspathic, and of dark bituminous shales with innumerable ferns, and other vascular cryptogamia, and coniferæ, &c. The uppermost group is composed of numerous alternations of coal, clay, shale, ironstone, and sandstone; the middle, of sandstones, shales, clays, and coarse quartzose conglomerates, generally of a dull red colour; and the lowermost, of crystalline limestones with occasional layers of chert, abounding in marine shells, corals, crinoidea, and other exuviae. These lower limestones are the principal repositories of the lead ores of Derbyshire.

IX. The DEVONIAN OR OLD RED SYSTEM. (*Ly.* II. p. 145. *Wond.* p. 613.) Conglomerates, quartzose grits, sandstones, marls, and limestones; the prevailing colour of all, is a dull red. Shells, corals, and fishes, many of which are peculiar.