

The coal of central France reposes on granite and other primary rocks, without the intervention of limestones or sandstones.\* In Poland, the lower beds of the coal measures pass insensibly into the transition rocks upon which they rest. In North America, the carboniferous series is largely developed, and has been ably illustrated by Professors Silliman, Eaton, Hitchcock, and other American geologists. The *coal* of the United States appears, however, to be referable to different geological eras; the most ancient belonging to the transition series, the next to the European carboniferous system, and the third to the brown coal, or tertiary lignite. The coal, culm, or *anthracite*, of Pennsylvania, (of which, through the kindness of Professor Silliman and Dr. Morton, I have a fine series, with vegetable remains), is associated with conglomerates, sandstones, and argillaceous slate; and the conglomerates are composed of quartz pebbles, like those of our old red sandstone. In the valley of the Connecticut, bituminous coal is stated by Professor Hitchcock to be intercalated in a group of strata, which he refers to the new red sandstone.† Deposits of anthracite, or stone coal, exist in Worcester and in Rhode Island, of which an admirable account has been published by Professor Silliman. Extensive coal fields are found to the west of the Alleghany mountains, towards the Mississippi. The base of the whole extent of the plain of that mighty

\* De la Beche.

† Geology of Massachusetts.