

westward, they reappear again in the granite and volcanic rocks of the Blue Ridge district. Even before the close of Archean time the Algonkian rocks had already been greatly crumpled, altered and metamorphosed by the intrusion of the igneous masses.

The oldest shore-line of Paleozoic time must have stood somewhere to the east of the Frederick valley, perhaps along the western flanks of Parr's Ridge, although smaller troughs penetrated the continental margin, as shown by the sandstone of Deer creek and the long band of phyllites and crystalline limestones which extend across Baltimore and Harford counties into the Peach Bottom region of the Susquehanna. Towards the close of the lower Silurian period occurred the first great mountain-making movement of Paleozoic time. It is known in New England as the "Green Mountain uplift." Although less pronounced toward the south, its influence was profoundly felt at least as far as Maryland, for it was probably during this period that the slates and limestones of the western Plateau region were so highly folded and metamorphosed.

During later Silurian time the shore-line of the inland sea was pushed considerably westward, and it is doubtful whether it ever again reached a point east of the Blue Ridge, as this barrier was doubtless raised in part at least by the disturbances of the lower Silurian, which have just been described. Through the upper Silurian, Devonian and Carboniferous periods comparative quiet reigned. While subject to continual oscillation, the sea-floor in the Appalachian Region was, in the main, sinking, although there was a gradual recession of the shore-line westward. Toward the end of Paleozoic time the great Appalachian trough gradually shallowed, and during the later part of the Carboniferous period became to a large extent occupied by swamps, in which the vegetable life of that time flourished luxuriantly. The remains of these ancient forests form the great coal seams of the Appalachian Region, although to-day we possess but their smallest remnants in Maryland.

At the close of the Paleozoic occurred probably the greatest mountain upheaval that eastern America has ever known. The vast sequence of sediments, which had accumulated in the great Appalachian