

Another most singular phenomenon in the environs of Milledgeville is the depth to which the gneiss and mica schist have decomposed in situ. Some very instructive sections of the disintegrated rocks have been laid open in the precipices of recently formed ravines. Were it not that the original intersecting veins of white quartz remain unaltered to show that the layers of sand, clay, and loam are mere laminæ of gneiss and mica schist, resolved into their elements, a geologist would suppose that they were ordinary alternations of sandy and clayey beds with occasional cross stratification, the whole just in the state in which they were first deposited. Now and then, as if to confirm the deception, a large crystal of felspar, eight or ten inches long, is seen to retain its angles, although converted into kaolin. Similar crystals, almost as perfect, may be seen washed into the tertiary strata south of the granitic region, where white porcelain clays, quartzose gravel, sand, and micaceous loam are found, evidently derived from the waste of decomposed crystalline rocks. I am not surprised, therefore, that some geologists should have confounded the ancient gneiss of this district, thus decomposed in situ, with the tertiary deposits. Their close resemblance confirms me in the opinion, that the arrangement of the gneiss and mica schist in beds with subordinate layers, both horizontal and oblique, was originally determined, in most cases at least, by aqueous deposition, although often modified by subsequent crystalline action.

The surprising depth of some of the modern ravines, in the neighborhood of Milledgeville, suggests matter of curious speculation. At the distance of three miles and a half due west of the town, on the direct road to Macon, on the farm of Pomona, is the ravine represented in the annexed wood-cut (p. 29). Twenty years ago it had no existence; but when the trees of the forest were cut down, cracks three feet deep were caused by the sun's heat in the clay; and, during the rains, a sudden rush of water through these cracks, caused them to deepen at their lower extremities, from whence the excavating power worked backward, till, in the course of twenty years, a chasm, measuring no less than 55 feet in depth, 300 yards in length, and varying in width