

bed. The locality is rather poor in ichthyolites, though I have found in it, after minute search, a few scales of the *Osteolepis*, and on one occasion one of the better marked plates of the *Coccosteus*; but in the vegetable impressions peculiar to the formation it is very abundant. These are invariably carbonaceous, and are not unfrequently associated with minute patches of bitumen, which, in the harder specimens, present a coal-like appearance; and the vegetable impressions and the bitumen seem to have misled the sagacious nobleman into the belief that coal might be found on his new property. He accordingly brought miners from the south, and set them to bore for coal in the gorge of the ravine. Though there was probably a register kept of the various strata through which they passed, it must have long since been lost; but from my acquaintance with this portion of the formation, as shown in the neighboring sections, where it lies uptilted against the granitic gneiss of the Sutors, I think I could pretty nearly restore it. They would first have had to pass for about thirty feet through the stratified clays and shales of the ichthyolite bed, with here and there a thin band of gray sandstone, and here and there a stratum of lime; they would next have had to penetrate through from eighty to a hundred feet of coarse red and yellow sandstone, the red greatly predominating. They would then have entered the great conglomerate, the lowest member of the formation; and in time, if they continued to urge their fruitless labors, they would arrive at the primary rock, with its belts of granite, and its veins and huge masses of hornblende. In short, there might be some possibility of their penetrating to the central fire, but none whatever of their ever reaching a vein of coal. From a curious circumstance, however, they were prevented from ascertaining, by actual experience, the utter barrenness of the formation.