



*Vegetable Structure of Mineral Charcoal from Clover-hill Mines, Virginia.*

coal of the Blackheath mines, and the annual quantity taken by Philadelphia alone, has of late years amounted to 10,000 tons. We might have expected, therefore, that there would be danger of the disengagement of inflammable gases from coal containing so much volatile matter. Accordingly, here, as in the English coal-pits, fatal explosions have sometimes occurred. One of these happened at Blackheath, in 1839, by which forty-five negroes and two white overseers lost their lives; and another almost as serious, so lately as the year 1844.

Before I examined this region, I was told that a strange anomaly occurred in it, for there were beds of coke overlying others consisting of bituminous coal. I found, on visiting the various localities of this natural coke, that it was caused by the vicinity or contact of volcanic rocks (greenstone and basalt), which, coming up through the granite, intersect the coal-measures, or sometimes make their way laterally between two strata, appearing as a conformable mass. As in the Durham coal-field in England (in the Haswell collieries, for example), the igneous rock has driven out all the gaseous matter, and, where