

Below this we have about 250 feet of shales, the highest of which have a green color, and the lowest pass into red: and these rest upon a bed of limestone 50 feet thick, beneath which is a thick mass of red sandstones and shales which belong to the "old red sandstone formation," rendered classic by the writings of the late Hugh Miller.

Since the opening of the Chesapeake and Ohio Canal to Cumberland, and the completion of the Baltimore and Ohio Railroad, a large amount of Coal has been brought to the markets on the seaboard, and its superiority as a fuel has been abundantly demonstrated. A given weight of it has been found to produce more steam than any other coal, and it is also especially adapted to the purposes of the blacksmith, giving a hollow fire with an intense heat.

This formation, without doubt, originally consisted of parallel strata, which, after being elevated above the waters which once covered them, were much worn away by the action of water. By this means the waters which flow into the Potomac and its affluents, have cut into and carried off a large portion of the original formation. The higher the bed, of course the more its area has been reduced, so that in fact the highest bed of coal (2 feet thick) has almost entirely been removed by natural causes.

Of the *main coal*, 300 feet lower, there remains not one-fifth of the original deposit, whilst the lowest beds retain nearly their original area.

The Potomac, at the mouth of the Savage River, has cut through the formation and exposed the strata to a depth of more than 1000 feet, or within less than 400 feet of its inferior limit.

The thickness of the thirty-two beds of coal as is shown in the table of strata, ranges from 14 feet or *main coal* down to a few inches. In general, the thickness is greatest in the central portions of the basin, diminishing and the coal becoming less pure towards the edges.

The main coal has so far been almost exclusively mined for the trade and will long continue to supply the demand for exporting to the sea board. Several other beds contain good coal, and will be available whenever an increased demand will require them to be worked.

In the prosecution of surveys in this region before alluded to, I took occasion to investigate the industrial value of all the coal beds whose thickness exceeded 3 feet, but it does not seem necessary to refer to them on the present occasion.—They should however be properly noticed in a complete and final report upon our economic geology.

Westward of the coal region just noticed, we have what I have designated as the Meadow Mountain coal field, which lies between the summits of that mountain and Negro Moun-