

*Economical Geology.*

*Coal.*—We have seen that the geological formation of Washington county is that of the upper part of the Coal Measures. It contains several thin seams of coal, which are not of much practical importance, but may prove available at some points for supplying the local demand. Of much greater importance to the county is the question whether the Lower Coal Measures, with their bountiful supply of coal, which is wrought in the adjoining counties, continue underneath the Upper Coal Measures into and through Washington county; and if they do, at what depth, and whether their coal is undiminished in thickness, a question that can only be determined by boring or shafting down to the horizon of these coals in the lower measures.

The highest coal-seam outcropping in this county, is one of its highest strata, and, therefore, found only on the east side of the county; and was found some miles south-east of Ashley, just beyond the county line; but it extends into Washington county, and probably through the hills, near Richview, and is apparently the same which has been discovered by Mr. QUICK, near Irvington. The coal is good, but is no where known to exceed twelve inches in thickness. It can therefore only be worked by stripping along its outcrop, where it can be conveniently exposed in ravines or on hillsides.

The next well-defined seam, and one which extends far beyond the limits of this county, is the one at the base of the slaty division, No. 3, of the county section, No. 11, in the Nashville shaft. It is found from fifteen to fifty feet below the Shoal-creek limestone, and appears to vary in this county between four and fourteen inches in thickness; but, near Highland, in the south-east part of Madison county, the same seam is eighteen inches thick, and has there been worked to a considerable extent. It is exposed at the Stone-coal ford, on the Okaw river, in the south-east quarter of section 1, township 1, range 6; and was found in the trial-shaft four miles west of Nashville, in the south-east quarter of section 17, township 2, range 3; also, in the Nashville shaft, in the south-east quarter of section 13, township 2, range 3; then, on the upper course of a branch, in the south-west corner of section 5, township 3, range 2; on Beaucoup creek, and also on a branch in the south-west quarter of section 35, township 2, range 2; and near Little Muddy creek, in the north part of section 21, township 3, range 1.

The next, and more extensively but very irregularly developed seam of coal, is in the upper part of the lower sandstone formation. As far as known, it no where attains a thickness of more than twelve inches, and is mostly thinner. It crops out at various points on Mud creek; and the coal on the east side of Elk prairie, three miles north-west of Elkton, is perhaps the same.

From the foregoing statement, we see that the supply of coal in the county mainly depends upon the prospects in the Lower Coal Measures. The question