

remain practically unaltered, be reasonable ground for expecting to find the different seams better adapted for the miner's work than at the Joggins.

I have already spoken of the Ragged Reef sandstones forming the upper cover of the Productive Measures. This sandstone, occurring in massive beds, overlaid by red and gray shales and sandstones, has been traced into the eastern district. From the report of Mr. McOuat, already quoted, it appears that it crosses the Maccan River below Athol, and strikes the Little Forks River about a mile below the Styles Brook, and follows the course of the river to a point about a mile beyond the post road.

The vertical thickness of Productive Measures between the base of this sandstone and the Millstone Grit is, at the Joggins, 4757 feet; at the Styles Brook, 4500 feet, equivalent at the latter place to an interval of about a mile, measured horizontally. From the course of the conglomerate, which turns to the south about three miles beyond the Styles mine, it would at no great distance run under the sandstone. This is accounted for by the officers of the Survey on the supposition of a great fault, an upthrow to the east, probably of several thousand feet. There are other methods by which this apparent obliteration of the Productive Measures can be explained, but the discussion would make this paper too long.

This district affords a capital illustration of the principle that Nature never yields her secrets to the efforts of individuals confined to limited districts. Explorations had been carried on for years in ignorance of the fact that to the north of the Productive Measures the line of the Millstone Grit had been drawn clearly and distinctly; and that to the south an equally distinct barrier defined the area in which the prospector would legitimately exercise his skill and perseverance.

The work of the Geological Survey in this coal field, for some unexplained reason, was left incomplete, but so far as it has been carried in the Northern district, useful hints have been given to the prospector, which I have endeavored to place plainly before you.

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