

Beyond the valley of the south branch of Michel creek, the coal measures outcrop well up the mountain side in the same attitude and relative position to the stream that the beds on the front of the escarpment bear to the Elk river. The measures continue eastward forming another syncline, narrower than that first described, on the west side of the valley, and should outcrop again on the mountains near the edge of the Cretaceous area. Further information is, however, wanting at this point.

North of Coal creek, in the area lying between the south branch of Michel creek and the Elk river, the beds do not long continue to hold the same regular form that they exhibit along Coal creek itself. A few miles north of the creek, the transition from the steep dips at the front to the horizontal position farther back is more abrupt; and, a short distance farther northward, becomes a sharp break with more or less faulting. This fault continues northward to opposite a point between Hosmer and Sparwood stations. Beyond that the beds resume a more normal attitude, such as they have near Coal creek. On the east side of the fault the rocks dip to the south at angles of 10° to 15° . The result of this is that the coal-measures are brought nearer to the surface, and they are found outcropping on the side of a deep gash in the hills made by a small stream emptying into the south branch of Michel creek, below the junction of the east fork. This stream thus causes another bay in the outline, at least of the upper part, of the coal-measures. Eastward from this place, the beds bend around gradually to join the measures at Marten creek, without any further serious dislocation. The fault above mentioned generally lies behind the front of the escarpment, but for a few miles northward from a point opposite Hosmer it cuts across the face of the hills some distance below the summit. This gives a complicated appearance which is the only exception to uniformity along the entire front.

Where Michel creek cuts through the northern part of the area, the basin is narrow, and the upper part of the coal-measures has been eroded away in the valley. The bottom of the syncline is probably a short distance to the east of Michel station, and it appears to rise gradually both to the north and the south, with