

river, and below the level of the water these beds may extend for a hundred feet. At this time (1889) no attempt had been made to work these valuable coal fields. In many of the coal banks of this locality through combustion or from fires started by Indians, an enormous amount of coal has been burned, leaving the hard shaly beds which intercept the seams, various shades of color from a bright red to a dark yellow. The stratification is so marked and the colors so brilliant that we called one spot Vermilion Point. Opposite the largest of these coal deposits is a fine alluvial flat of several hundred acres—a splendid town site, waiting the time when the “iron horse” and busy hands will utilize this nature’s gift to man. For miles lower down the river we pass extensive coal banks, all showing more or less the marks of fire. The river is smooth with numerous shoal rapids and free from boulders.

GOLD.

Gold can be washed out from many of the alluvial deposits of this river and most of the sand-bars of the Red Deer will yield gold in small quantities. A sand-bar near our starting point on this river yielded to an expert at panning from one to two dollars a day. It is supposed that the gold in the Red Deer and other rivers of the Northwest has been washed from the soft rocks which formed the banks of these rivers, having in the first place been derived from the quartzite and other rocks of the Rocky Mountains.

IRON.

Clay ironstone is met with in thin beds and as nodules which contain a percentage of metallic iron. Both shells and plants are found in this ironstone; one nodule we found contained a curious member of the lobster family. We have now reached “Tail Creek” a stream of about twenty feet wide, the outlet of Buffalo Lake, to which a small band of Cree Indians we have just met are bound. They have heard that two buffaloes have been seen in that vicinity and are making their way to the big lake to try and capture them. These Indians are very poor. Two sturgeon, members of the band stripped and swam the river to our camp with the hope of getting a little food. Here, alluvial banks of from one to two hundred feet high occupy the north side of the river, while on the south