

the Flathead Valley the land is largely sloughs and islands, cut up by moving channels. On these low lands, from 14 miles above the Boundary northward for about 10 miles, there is a strip of timber having a width of from one-quarter to one mile, say an average of about one-half mile wide, on which there is some very good, large timber, chiefly spruce and tamarack, with some large cottonwood. This timber could be floated down streams in the spring but at considerable initial cost, as there are a number of extensive log-jams occurring in the river, besides many abrupt turns and bars. The trees on the upper reaches of the river are not suitable for lumber, but would serve for mine timbers should they be so required.

SOIL.—The ancient wide valley of the Flathead, including the present valley and that of its chief tributaries for some 12 to 20 miles above the Boundary, has been previously described as consisting of a series of gravel benches. On this gravel, to a depth of from 6 inches to 12 inches, lies a fine silt and on the lower elevations a dark loam, largely produced from sediment deposited at unusually high water and mixed with a certain amount of vegetable mould. This supports, on many small and larger open prairies, a fine growth of pea-vine, bunch-grass, etc., providing excellent feed for transient horses, etc., but the soil has not a depth to admit of cultivation, lying, as it does, on a bed of loose gravel.

The Flathead is a wild stream at high water, and is constantly changing its bed in the flat valley through which it runs, forming innumerable islands and back waters; in fact, so changeable is its course that no depth of soil seems to have collected on the sides of the valley.

Other than the valley mentioned the district to the west of the river is occupied by high rugged mountain ranges, for the most part bare or covered with stunted vegetation. The hills to the west of the river are more rounded off, and are often covered with small growth to the summits, but they rise so abruptly as to be useless for either grazing or agricultural purposes.

As already noted, the elevation of the river at the Boundary is 4,000 feet above sea level, so that, taking the character of the soil into account, none of the land in this section is deemed fit for agriculture, even at the southern end of the district.

There are three large creeks entering from the west, the valleys of these being about half a mile wide to where the hills rise steeply. These valleys contain considerable bog or marsh land, but lie at an elevation of nearly 4,400 feet.

MINERAL RESOURCES.—The district is so shut off from the remainder of the Province that very little prospecting has been done there for mineral other than coal or oil, particularly by British Columbia prospectors, although a number from Montana have visited the vicinity. As far as could be learned from prospectors and others, no mineral locations have been recorded in the district, nor has any mineral of economic value been found. It was reported that copper had been found on one of the tributaries

of the Flathead flowing in from the east, but nothing has been done to prove this alleged discovery, nor could the report be substantiated.

On the Flathead, near the mouth of the first creek above Pass Creek (still un-named) there is evidence that in the 60's or 70's considerable prospecting had been done for placer gold in the gravel of the creek bed, but as far as can be learned, without success.

There is a story, of Indian origin, in circulation among the prospectors, of a "lost creek" in which, in the early days, two men discovered valuable placers, and took out considerable gold. One of these men died at the diggings, and the other, going south to winter among the Indians, died also, and with him all knowledge of the whereabouts of the creek. The Indians claim this creek to have been an eastern tributary of the Flathead, and some of the old-time prospectors are still searching for the lost diggings. No black sand or trace of gold could be observed in the river or any of the creeks, which fact, coupled with the geological formation of the mountains to the eastward, renders the existence of placer gold very improbable. No mineral float, or indication of mineral, was observed at any place in the district.

COAL.—To the eastward of the main Flathead River the rock formations forming the mountain ranges appear to be, and have been so classed by the Geological Survey, of an older age than the Cretaceous, which is the coal-bearing formation in this part of British Columbia; consequently, no coal may be expected in this district nor could any trace of such be found. In the southern portion of the district, to the west of the Flathead, the geological formation is more recent than on the east side of the river. From the few rock exposures visible in this heavily wooded section it is impossible to learn much in a hurried trip.

The hills along the valley of Calder Creek are rounded off, the flanks being covered by wash which is chiefly dark shale and clay, through which a few outcroppings of light-coloured limestone and sandstone are visible. From the appearance of such formation as was seen, it is probable that it belongs to what has been classed by the Geological Survey as the "Fernie shales," and this section may possibly contain a small outlying basin of the Cretaceous or coal-bearing rocks, although no coal outcroppings are reported as found. This section has not been prospected, there are no trails in it and travelling is difficult.

On a small creek flowing from the north into Calder Creek, about 10 or 12 miles from its junction with the Flathead, there were exposed beds of a black carbonaceous shale which contains concretions of claystone. These concretions, when freshly broken, give off a strong odor of petroleum, but examination of the creek for some distance up revealed nothing further. This creek is about on the boundary between Lots 4,589 and 4,593; it is impossible, in the absence of a survey, to say in which it is situated.

The northern portion of the Flathead Valley has been examined in detail by parties of the Geological Survey and the outcroppings of the coal formations are shown in a "Map of the Crow's Nest Coal Fields"