

by Dr. Dawson and already quoted seems the only one, viz., that these older rocks have been, by a gigantic "overthrust fault," slipped eastward over the Cretaceous (coal-bearing) beds of the plains for a number of miles, and that the subterranean heat, acting on these coal-bearing rocks, generated oil which finds its way up through the older but now overlying rocks. If this explanation is the correct one, the "overthrust" must have been very great indeed to bring the Cretaceous beds underneath the present oil seepage, as the Cambrian beds extend eastward from 12 to 15 miles from this point, in fact over the summit into Alberta.

The oil might have travelled westward underground for some distance, but this is not probable, as a few miles to the eastward of the point of occurrence of the oil there are several faults which have the appear-

ingly problematic; that if such body of oil does occur it can only be demonstrated by boring in all probability to a considerable depth and at a considerable cost.

THE SULLIVAN COMPANY'S SMELTER AT MARYSVILLE, EAST KOOTENAY.*

The property of the Sullivan Group Mining Company, of Spokane, Washington, was visited by the Provincial Mineralogist last summer. In the recently issued Report of the Minister of Mines appear some information relative to the company's mineral claims on Sullivan Hill, Mark Creek, about two miles from the town of Kimberley, East Kootenay, and the following account of the company's unfinished lead smelter:



Marysville Smelter, Fort Steele Mining Division—Furnace Shed.

ance of being profound, and would, therefore, have allowed the gas and oil to rise to the surface through them, but of this there is no indication. This latter fact does not prove that oil has not been generated in this faulted region, as it may have travelled eastward along the main fault seam, and it may be that which is found seeping in Alberta.

As to whether there is oil in quantity to be obtained by boring, there is little evidence; the seepage at present is trifling, but the geological structure seems suitable for the retention of oil if produced in quantity. If it does so exist it must in all probability be at a very considerable depth, possibly over 3,000 feet.

In conclusion, I would report: the actual seeping of oil in three or more places; that the existence of a body of oil underground is quite possible, though ex-

MARYSVILLE.—The little town of Marysville is situated on Mark Creek, where it crosses the flat plateau or bench of the valley of the St. Mary's River, some five or six miles from the town of Kimberley, near which the North Star and Sullivan mines are located. A spur of the Cranbrook & Kimberley branch railway runs into the town, and recently a large saw-mill has been built, giving work to a number of men.

SMELTER.—Marysville is the site chosen by the Sullivan Mining Co. for the erection of a lead smelting plant for the treatment of ore from its mine, and probably in the expectation also of getting ores from the other mines in the locality. The

*The Provincial Mineralogist, in Annual Report of Minister of Mines for 1903.