

Natural exposures of fossil fuel in the region of Edmonton have already been described by Mr. J. B. Tyrrell and others; but the results of recent drillings and shaft excavations awaited compilation and publicity. The object of this memoir is, to set forth the information gathered during a visit to the locality in the autumn of 1908. In the collection of data and facts relative to the occurrences of coal and the records of bore holes, I have to express my indebtedness to Mr. Norman Fraser, Inspector of Mines; Mr. Frank B. Smith, Mining Engineer; Mr. Charles Taylor, Superintendent Edmonton Street railway, and to Mr. G. A. Reid of the Registry Office; all of whom generously imparted valuable information which they had gained by personal observation of actual conditions at the points I was unable to visit.

Location and Area.

Edmonton is situated on the banks of the Saskatchewan river, and as this stream has cut a valley here over 165 feet deep, exposures of the underlying strata are frequent. Coal seams of workable dimensions occur at Clover Bar, five miles east of the city, and continue with a slight westerly dip, underneath the town. The total area over which this coal can be mined is not restricted to the banks of this stream, but forms a wide band running northwesterly and southeasterly. The present report deals more particularly with the vicinity of Edmonton, but information relative to other coal outcrops and coal mines of the surrounding district will also be included.

Bibliography.

Mention of the coal at Edmonton is to be found in several publications, mainly books of travel, but the first and only complete geological examination of the district was made by Mr. J. B. Tyrrell in 1885 and 1886, and published as Part E, Vol. II, Annual Report Geological Survey, 1886. Details of production are to be found in the Annual Reports of the Minister of Public Works for Alberta, and, previous to the creation of the Province, in the reports for the North West Territory.

Object of Present Investigations.

For many years mining has been carried on by drift levels from the banks of the river and no attempt at correlation of the seams has been made. The present hurried investigation aims to be a compilation of the number of seams, their thickness, characters, and the amount of covering over them.