

beds reach a thickness of 25 feet, constituting one seam or divided by a small parting into two nearly equal seams. The sandstones of the overlying formation are perhaps more compact than those in the upper part of the Edmonton, but a zone in the latter formation is characterized by the distinctly yellowish colour of its sandstones, a feature characteristic of the upper formation. In the central portion of the Edmonton, whitish clays and sandstones are the characteristic rocks, and since a second coal-bearing horizon is here again in evidence it is unfortunate that mining in this horizon should have to be carried out in such very soft rocks. The lower portion is not well defined, since the shale bands gradually increase in thickness in going downward and merge gradually into the shale formation below.

A thickness of 700 feet is calculated by Mr. Tyrrell as the maximum thickness of the formation. Annual Report, Geological Survey, 1886, Vol. 2, p. 131 E.

ECONOMIC GEOLOGY.

The rocks of the Edmonton district, consisting mainly of clays and sands, are of economic importance on account of the accompanying beds of coal with which they are associated. The possible value of the marls and clays for the manufacture of cement, or the possibility of fine clays being associated with these coal beds, might be also mentioned. The clays have for some time been utilized in the manufacture of bricks for building, but tests should be made of their heat resisting properties. Gold, which has for many years been washed from the bars of the river both above and below Edmonton, is thought to have been derived from the rocks of the upper members of the formation by the concentration of minute particles during the erosion of the river channel.

Gravel dredged from the bed of the river is used extensively for road making. It is washed and crushed at a plant near the low level bridge, and in the operation a small amount of gold is daily recovered.

Coal Horizons.

TERTIARY SEAMS.

In the sandstones lying above the upper Cretaceous or Edmonton formation a few isolated exposures of coal have been found, but as