

naces have been erected, at the former place for the manufacture of ordinary pig, while at the latter only charcoal pig-iron is made.

“At Ferrona the ‘New Glasgow Iron, Coal and Railway Co.’ have an extensive plant, consisting of one stack of eight tons capacity, with the necessary appurtenances and thirty-six Belgian copper coke ovens. They have also built a railway twelve miles and a half long from the works to Black Rock. The Bridgeville works are owned and operated by the ‘Pictou Charcoal Iron Co.’ and consist of one stack of twenty-five tons capacity, with necessary blowing plant, etc., and a range of twenty charcoal kilns. A siding has been laid to the works from the line of the New Glasgow and Intercolonial Railway.

“Operations at the Coxheath Copper Mines in Cape Breton were suspended during the year, and it is said that in the near future they will be reopened and operated on a large scale. The old established mining industries, such as gold, coal, iron ore, gypsum and manganese, are being carried on as heretofore. This may also be said of building stone, granite, grindstones and mineral waters.

“In the province of Quebec I visited the asbestus district of Black Lake and Thetford, and the gold mines on the Chaudière and tributaries. Asbestus mining seems to have been somewhat overdone, the result being that several of the works are closed to enable the owners to dispose of heavy stocks which have been carried over; to do this there has been a very considerable decline in prices. In the Chaudière gold district work was progressing on the Gilbert River under the management of Mr. W. P. Lockwood, and development work was being actively carried on upon the Du Loup and Millstream, as well as in Ditton township further to the south-west.

“In Ontario I was engaged principally in correcting our lists of producers of structural and other mineral materials.

“Boring operations were being carried on as in 1891, over considerable areas in the south-western part of the province, notably in Welland and Essex counties, with very favourable results, large flows of gas having been found at several points. In Welland county oil had been found in two areas, the flow being from the Medina white sandstone.

“Mr. Brumell returned to Ottawa on the 7th of November.”

The total cost of the season’s explorations under the division of Mineral Statistics and Mines was \$3,665.

PALEONTOLOGY AND ZOOLOGY.

Mr. Whiteaves reports that the fourth part of the first volume of ‘Contributions to Canadian Palæontology,’ was published in December last. It consists of a systematic and descriptive report, of one hundred and five pages octavo of letter press, illustrated by fifteen full page lithographic plates, “on the fossils of the Devonian rocks of the islands, shores or immediate vicinity of Lakes Manitoba and Winnipegosis,” collected for the most part by Mr. Tyrrell in 1888 and 1889. Prior to the year 1890, not more than six species of fossils had been recorded as occurring in these rocks, but in this report as many as one hundred and thirty-three species are either identified or described.

A large series of Ammonites from the Cretaceous rocks of the district of Athabasca, collected by Mr. McConnell in 1889 and 1890, has been studied, and a paper descriptive of the species represented has been contributed to the ‘Transactions of the Royal Society of Canada’ for 1892. This paper will be illustrated by four full page quarto plates.

A paper entitled “Description of a new genus and species of Phyllocarid crustacean from the Middle Cambrian of Mount Stephen, B. C.,” and illustrated by one woodcut, has been published in the ‘Canadian Record of Science’ (Montreal) for October, 1892. The specimens upon which this paper is based, were collected by Mr. McConnell in 1888 and by Dr. Ami in 1891.

The fourth part of the ‘Contributions to Canadian Micro-Palæontology’ was published in July, 1892. It consists of a paper on “Radiolaria from the Pierre formation of North Western Manitoba,” by Dr. D. Rüst, of Hanover, Germany, who has made a life study of fossil Radiolaria, with a short introduction by Mr. J. B. Tyrrell, and is illustrated by three lithographic plates.